

FS Section	Content field	Explanation of content	CSR	eSDS
1. Title	1.1 Title of SPERC	Polymer processing (industrial): solvent-borne	Y	Y
	1.2 SPERC code	ESVOC SPERC 4.21a.v3	Y	Y
2. Scope	2.1 Substance/Product Domain			
	Substance types / functions / properties included or excluded	Applicable to petroleum substances and petrochemicals.	Y	N
	Additional specification of product types covered:	Includes a variety of aliphatic and aromatic hydrocarbons, ketones, alcohols, acetates, glycols, glycol ethers, and glycol ether acetates.	Y	N
	Inclusion of sub-SPERCs	Yes	N	N
	2.2 Process domain			
	Description of activities/processes:	Covers the processing of formulated polymers including material transfers, additives handling (e.g. pigments, stabilisers, fillers, and plasticisers), moulding, curing and forming activities, material re-works, storage and associated maintenance.	Y	Y
	2.3 List of applicable Use Descriptors			
	LCS	IS – Use at industrial sites	Y	Y
SU	SU12 – Manufacture of plastics products, including compounding and conversion	Y	Y	
PC	PC32 – Polymer preparations and compounds	Y	Y	
3. Operational conditions	3.1 Conditions of use			
	Location of use	Indoor	Y	Y
	Water contact during use	Yes	Y	Y
	Connected to a standard municipal biological STP	Yes	Y	Y
	Rigorously contained system with minimisation of release to the environment	No	Y	N
	Further operational conditions impacting on releases to the environment	Volatile compounds subject to air emission controls. Wastewater emissions generated from equipment cleaning with water.	Y	Y
	3.2 Waste Handling and Disposal			
Waste Handling and Disposal:	Residual raw materials and are in some cases recycled and fed back into the process reactor to improve efficiencies. In other cases, residues and by-products are used as raw materials for other downstream applications (EEA, 2016). Wastewater generated during cleaning and maintenance operations is directed to a waste water treatment plant for biological degradation. Atmospheric release of waste vapour may be ameliorated using wet scuubbers, thermal oxidizers, solid adsorbents, membrane separators, biofilters, and/or cold oxidizers for trapping residual vapours. All unrecovered waste is handled as an industrial waste that can be incinerated. EU (2016). Best Available Techniques (BAT) Reference Document for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector. Report EUR 28112 EN. European IPPC Bureau. Seville, Spain. http://eippcb.jrc.ec.europa.eu/reference/BREF/CWW_Bref_2016_published.pdf EEA (2016). Prevention of hazardous waste in Europe — the status in 2015 European Environment Agency, Report No. 35/2016. Copenhagen,	Y	N	

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		Denmark. https://www.eea.europa.eu/publications/waste-prevention-in-europe/file		
4. Obligatory RMMs onsite	RMM limiting release to air:	No obligatory RMMs.	Y	Y
	RMM Efficiency (air):	Optional RMMs have been assigned a nominal removal efficiency value that is not accounted for in the air release factor. See the background document for more information.	Y	Y
	Reference for RMM Efficiency (air):	EU (2016). Best Available Techniques (BAT) Reference Document for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector. Report EUR 28112 EN. European IPPC Bureau. Seville, Spain. http://eippcb.jrc.ec.europa.eu/reference/BREF/CWW_Bref_2016_published.pdf	Y	N
	RMM limiting release to water:	Oil-water separation (e.g. via oil water separators, oil skimmers, or dissolved air flotation) is required.	Y	Y
	RMM Efficiency (water):	The efficiency of this RMM varies dependent on the treatment technology and the properties of the substance.	Y	Y
	Reference for RMM Efficiency (water):	EU (2016). Best Available Techniques (BAT) Reference Document for Common Waste Water and Waste Gas Treatment/Management Systems in the Chemical Sector. Report EUR 28112 EN. European IPPC Bureau. Seville, Spain. http://eippcb.jrc.ec.europa.eu/reference/BREF/CWW_Bref_2016_published.pdf	Y	N
	RMM limiting release to soil:	The sludge generated from wastewater treatment is not applied to agricultural soil.	Y	Y
	RMM Efficiency (soil):	Not applicable	Y	Y
	Reference for RMM Efficiency (soil):	ECHA (2016). <i>Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.16: Environmental Exposure Assessment</i> Version 3.0. European Chemicals Agency. Helsinki, Finland. https://echa.europa.eu/documents/10162/13632/information_requirements_r16_en.pdf	Y	N
5. Exposure Assessment Input	5.1 Substance use rate			
	Amount of substance use per day:	50,000 kg/day	Y	Y
	Fraction of EU tonnage used in region:	100%	Y	N
	Fraction of Regional tonnage used locally:	100%	Y	N
	Justification / information source:	ECHA (2016). <i>Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.16: Environmental Exposure Assessment</i> Version 3.0. European Chemicals Agency. Helsinki, Finland. https://echa.europa.eu/documents/10162/13632/information_requirements_r16_en.pdf	Y	N
	5.2 Days emitting			
	Number of emission days per year:	300 (default value)	Y	Y
	Justification / information source:	ECHA, 2016. <i>Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.16: Environmental Exposure Assessment</i> Version 3.0. European Chemicals Agency. Helsinki, Finland. https://echa.europa.eu/documents/10162/13632/information_requirements_r16_en.pdf	Y	N
	5.3 Release factors			
	sub-SPERC identifier:	ESVOC 4.21a.a.v3 VP >10000 Pa; WS <0.001 mg/l	Y	N
ERC	ERC 4			
sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility <0.001 mg/l	Y	N	

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5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0000007%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):		Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.b.v3 VP >10000 Pa; WS 0.001-0.01 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility 0.001-0.01 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM).	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)		
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.000002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.c.v3 VP >10000 Pa; WS 0.01-0.1 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility 0.01-0.1 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2,	Y	N

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		Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)		
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.00002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.d.v3 VP >10000 Pa; WS 0.1-1.0 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility 0.1-1.0 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N

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5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.e.v3 VP >10000 Pa; WS 1-10 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility 1-10 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				

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	Numeric value / percent of input amount (Water):	0.002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.f.v3 VP >10000 Pa; WS 10-100 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility 10-100 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.02%	Y	Y

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	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.g.v3 VP >10000 Pa; WS 100-1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility 100-1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.2%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the	Y	N

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		reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.h.v3 VP >10000 Pa; WS >1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure >10000 Pa Water solubility >1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	75%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.7%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16	Y	N

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		factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.i.v3 VP 1000-10000 Pa; WS <0.001 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility <0.001 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0000007%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		(European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.j.v3 VP 1000-10000 Pa; WS 0.001-0.01 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility 0.001-0.01 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.000002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category.	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.k.v3 VP 1000-10000 Pa; WS 0.01-0.1 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility 0.01-0.1 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.00002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.I.v3 VP 1000-10000 Pa; WS 0.1-1.0 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility 0.1-1.0 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.m.v3 VP 1000-10000 Pa; WS 1-10 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility 1-10 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				

FS Section	Content field	Explanation of content	CSR	eSDS
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.n.v3 VP 1000-10000 Pa; WS 10-100 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility 10-100 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.02%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y

FS Section	Content field	Explanation of content	CSR	eSDS
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.o.v3 VP 1000-10000 Pa; WS 100-1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility 100-1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.2%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)		
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.p.v3 VP 1000-10000 Pa; WS >1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1000-10000 Pa Water solubility >1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	50%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.7%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM).	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf		
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.q.v3 VP 100-1000 Pa; WS <0.001 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility <0.001 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0000007%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2,	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)		
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.r.v3 VP 100-1000 Pa; WS 0.001-0.01 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility 0.001-0.01 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.000002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
	5.3.4 Release Factor – waste			
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.s.v3 VP 100-1000 Pa; WS 0.01-0.1 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility 0.01-0.1 mg/l	Y	N
	5.3.1 Release Factor – air			
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
	5.3.2 Release Factor – water			
	Numeric value / percent of input amount (Water):	0.00002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
	5.3.3 Release Factor – soil			
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
	5.3.4 Release Factor – waste			

FS Section	Content field	Explanation of content	CSR	eSDS
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.tv3 VP 100-1000 Pa; WS 0.1-1.0 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility 0.1-1.0 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.u.v3 VP 100-1000 Pa; WS 1-10 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility 1-10 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		(DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .		
	sub-SPERC identifier:	ESVOC 4.21a.v.v3 VP 100-1000 Pa; WS 10-100 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility 10-100 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.02%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .		
	sub-SPERC identifier:	ESVOC 4.21a.w.v3 VP 100-1000 Pa; WS 100-1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa Water solubility 100-1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.2%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .		
	sub-SPERC identifier:	ESVOC 4.21a.x.v3 VP 100-1000 Pa; WS >1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 100-1000 Pa (Low solubility <100 mg/l) Water solubility >1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	25%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.7%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals.	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .		
	sub-SPERC identifier:	ESVOC 4.21a.y.v3 VP 10-100 Pa; WS <0.001 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility <0.001 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0000007%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom.	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .		
	sub-SPERC identifier:	ESVOC 4.21a.z.v3 VP 10-100 Pa; WS 0.001-0.01 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility 0.001-0.01 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.000002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
	sub-SPERC identifier:	ESVOC 4.21a.aa.v3 VP 10-100 Pa; WS 0.01-0.1 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility 0.01-0.1 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.00002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.bb.v3 VP 10-100 Pa; WS 0.1-1.0 mg/l	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility 0.1-1.0 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.cc.v3 VP 10-100 Pa; WS 1-10 mg/l	Y	N
	ERC	ERC 4		

FS Section	Content field	Explanation of content	CSR	eSDS
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility 1-10 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.dd.v3 VP 10-100 Pa; WS 10-100 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility 10-100 mg/l	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.02%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.ee.v3 VP 10-100 Pa; WS 100-1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility 100-1000 mg/l	Y	N
5.3.1 Release Factor – air				

FS Section	Content field	Explanation of content	CSR	eSDS
	Numeric value / percent of input amount (Air)	10%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.2%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.ff.v3 VP 10-100 Pa; WS >1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 10-100 Pa Water solubility >1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	10%	Y	Y

FS Section	Content field	Explanation of content	CSR	eSDS
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.7%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.gg.v3 VP 1-10 Pa; WS <0.001 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility <0.001 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)		
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0000007%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.hh.v3 VP 1-10 Pa; WS 0.001-0.01 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility 0.001-0.01 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM).	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)		
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.000002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.ii.v3 VP 1-10 Pa; WS 0.01-0.1 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility 0.01-0.1 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2,	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)		
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.00002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. (https://eippcb.jrc.ec.europa.eu/reference/production-polymers).	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. (http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956).	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.jj.v3 VP 1-10 Pa; WS 0.1-1.0 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility 0.1-1.0 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.kk.v3 VP 1-10 Pa; WS 1-10 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility 1-10 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				

FS Section	Content field	Explanation of content	CSR	eSDS
	Numeric value / percent of input amount (Water):	0.002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.II.v3 VP 1-10 Pa; WS 10-100 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility 10-100 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.02%	Y	Y

FS Section	Content field	Explanation of content	CSR	eSDS
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.mm.v3 VP 1=10 Pa; WS 100-1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility 100-1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.2%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.nn.v3 VP 1-10 Pa; WS >1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility >1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	2.5%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.7%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.oo.v3 VP <1 Pa; WS <0.001 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility <0.001 mg/l	Y	N
.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0000007%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		(European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.pp.v3 VP <1 Pa; WS 0.001-0.01 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility 0.001-0.01 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.000002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category.	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.qq.v3 VP <1 Pa; WS 0.01-0.1 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility 0.01-0.1 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.00002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .		
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.rr.v3 VP <1 Pa; WS 0.1-1.0 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure 1-10 Pa Water solubility <1 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.0002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.ss.v3 VP <1 Pa; WS 1-10 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility 1-10 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.002%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				

FS Section	Content field	Explanation of content	CSR	eSDS
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.tt.v3 VP <1 Pa; WS 10-100 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility 10-100 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.02%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y

FS Section	Content field	Explanation of content	CSR	eSDS
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.uu.v3 VP <1 Pa; WS 100-1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility 100-1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.2%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)		
5.3.4 Release Factor – waste				
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
	sub-SPERC identifier:	ESVOC 4.21a.vv.v3 VP <1 Pa; WS >1000 mg/l	Y	N
	ERC	ERC 4		
	sub-SPERC applicability:	Vapour pressure <1 Pa Water solubility >1000 mg/l	Y	N
5.3.1 Release Factor – air				
	Numeric value / percent of input amount (Air)	1%	Y	Y
	Justification of RFs (Air):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM). European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (solvents & processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tqdp2_2ed_en.pdf)	Y	N
5.3.2 Release Factor – water				
	Numeric value / percent of input amount (Water):	0.7%	Y	Y
	Justification of RFs (Water):	The factor was established after identifying the geometric mean for eight water solubility categories and factoring these values together with the reported water usage at multiple sites manufacturing thermoplastic elastomers. The volume of cooling and stripping water required at 16 factories producing thermoplastics did not exceed 7 m ³ /tonne of polymer (European Commission, 2007). This factor provided the basis for calculating the individual release factors for each water solubility category. European Commission (2007). Reference Document on Best Available Techniques in the Production of Polymers European Integrated Pollution Prevention Bureau. European Commission. Seville, Spain. https://eippcb.jrc.ec.europa.eu/reference/production-polymers .	Y	N
5.3.3 Release Factor – soil				
	Numeric value / percent of input amount (Soil):	0.1%	Y	Y
	Justification of RFs (Soil):	This value has been adopted from a published source that documents the worst-case estimates of air emissions based on the expert judgement of environmental scientists from the Dutch National Institute for Public Health and the Environment (RIVM).	Y	N

FS Section	Content field	Explanation of content	CSR	eSDS
		European Commission (2003). European Commission Technical Guidance Document on Risk Assessment (EUTGD), Report EUR 20418 EN/2, Appendix 1, Table A3.11 (processing aids), Brussels, Belgium. (https://echa.europa.eu/documents/10162/16960216/tgdpart2_2ed_en.pdf)		
	5.3.4 Release Factor – waste			
	Percent of input amount disposed as waste:	0.1%	Y	N
	Justification of RFs:	The waste generation factor was taken from a life cycle assessment for the closed-loop production of office paper from recycled paper feedstock (DEFRA, 2012). The value represents the amount of industrial waste generated during pulp and paper production at a facility in Germany. An uncertainty factor has not been applied to the cited value since the facility is representative of the operations at other facilities using water treatment chemicals. DEFRA (2012). Streamlined LCA of Paper Supply Stream. Department for Environment Food & Rural Affairs. London, United Kingdom. http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=18956 .	Y	N
References to SPERC Background Document				
	Reference to Background Document	ESIG/ESVOC (2023). SpERC Background Document. Specific Environmental Release Categories (SpERCs) for the use of solvents and solvent borne substances in the industrial production and/or use of water treatment chemicals, polymers, mining chemicals, and fuels. European Solvents Industry Group. Brussels, Belgium.	Y	N