FS Section	Content field	Explanation of content	CSR[1]	eSDS[2]
1. Title	1.1 Title of SPERC	(Biocidal Product in) Agrochemical use (consumer): solvent-borne	Y	Y
	1.2 SPERC code	ESVOC SPERC 8.11b.v2	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	No	N	N
	2.2 Process domain			
	Description of activities/processes:	Covers the consumer use in agrochemicals in both liquid and solid forms.	Y	Y
	2.3 List of applicable Use Descriptors			
	LCS	C – Consumer use	Y	Y
	SU	SU1 – Agriculture, forestry, fishery	Y	Y
	PC	PC8 – Biocidal products	Y	Y
3. Operational conditions	3.1 Conditions of use			
	Location of use	Indoor/Outdoor	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 prone to atmospheric release. Wastewater emissions generated from equipment cleaning with water.	Y	Y
	3.2 Waste Handling and Disposal			
	Waste Handling and Disposal:	Although household hazardous waste (HHW) represents a small portion of the total domestic waste produced by consumers, it needs to be separated from normal trash and amassed for special handling. Many regional municipalities have established voluntary procedures for the identification, collection, and disposal of HHW in a safe and efficient manner. Once amassed, the HHW can be transported to collection sites where it is reused, recycled, or incinerated. The handling and disposal of hazardous waste needs to conform with established practices and local/regional	Y	N

[1] Explanations that are more detailed can be provided for the CSR..

[2] For the ES for communication a standard phrase may be selected from the ESCom catalogue when available. When no phrase is available yet in the catalogue the proposed phrase can be reported here.

FS Section	Content field	Explanation of content	CSR[1]	eSDS[2]
		regulations in order to minimize environmental release and the potential for ecological harm. Inglezakis, V.J., Moustakas, K. (2015). Household hazardous waste management: A review. Journal of Environmental Management 150, 310-321. doi: 10.1016/j.jenvman.2014.11.021.		
4. Obligatory RMMs onsite	**RMM limiting release to air:**	No obligatory RMMs.	Y	Y
	RMM Efficiency (air):	Emissions to air are minimized when the product is used in accordance with the manufacturers' instructions and established practices.	Y	Y
	Reference for RMM Efficiency (air):	BCERF, 1999. Safe Use and Storage of Hazardous Household Products. Cornell University, Program on Breast Cancer and Environmental Risk Factors. Ithaca, NY. https://extensionhealthyhomes.org/Documents/fs22.safeUse.pdf.	Y	N
	RMM limiting release to water:	By default, the release to water is modified after biological treatment at a standard municipal sewage treatment plant (STP) with an effluent flow rate of 2,000 m^3/day. The effluent discharge rate is applicable to a group of 10,000 inhabitants who generate 200 L of wastewater per person.	Y	Y
	RMM Efficiency (water):	The removal efficiency is provided by the SimpleTreat model, which takes into consideration the biodegradability, partitioning behaviour, and volatility of an organic substance. Degradation assumes the operation of an aerobic activated-sludge reactor under steady-state conditions.	Y	Y
	Reference for RMM Efficiency (water):	ECHA (2016). Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.16: Environmental Exposure Assessment Version 3.0. European Chemicals Agency. Helsinki, Finland. https://echa.europa.eu/documents/10162/13632/information_requirements_r16_en.pdf	Y	N
	RMM limiting release to soil:	No obligatory RMMs.	Y	Y
	RMM Efficiency (soil):	Emissions to soil are minimized when the product is used in accordance with the manufacturers' instructions and/or the established practices.	Y	Y
	Reference for RMM Efficiency (soil):	BCERF, 1999. Safe Use and Storage of Hazardous Household Products. Cornell University, Program on Breast Cancer and Environmental Risk Factors. Ithaca, NY. https://extensionhealthyhomes.org/Documents/fs22.safeUse.pdf.	Y	N
5. Exposure Assessment Input	**5.1 Substance use rate**			
	Amount of substance use per day:	Supplied by registrant	Y	Y
	Fraction of EU tonnage used in region:	10% (default value)	Y	N
	Fraction of Regional tonnage used locally:	0.05% (default value) **(NB the value of 0.2% in the original factsheet includes the recommended adjustment factor of 4. This correction has not been used in other professional factsheets and has been removed.)**	Y	N
	Justification / information source:	ECHA (2016). Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.16: Environmental Exposure Assessment 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:	365 (default value)	Y	Y
	Justification / information source:	ECHA, 2016. Guidance on Information Requirements and Chemical Safety Assessment. Chapter R.16: Environmental Exposure Assessment	Y	N

FS Section	Content field	Explanation of content	CSR[1]	eSDS[2]
		Version 3.0. European Chemicals Agency. Helsinki, Finland. https://echa.europa.eu/documents/10162/13632/information_requirements_r16_en.pdf		
	5.3 Release factors			
	sub-SPERC identifier:	ESVOC 8.11b.v2	Y	N
	ERC	ERC 8a ERC 8d		
	sub-SPERC applicability:	None	Y	N
	5.3.1 Release Factor – air			
	Numeric value / percent of input amount (Air)	90%	Y	Y
	Justification of RFs (Air):	The value was assigned using a mass balance approach that takes advantage of the sector knowledge and professional judgement of individuals within the expert group responsible for creating this SpERC factsheet. The determination employs an informed decision-making process that assumed complete release of the chemical substances to the environment. Mass partitioning of the release to air, water, and soil takes into consideration the default release factors associated with ERC 8a and 8d. The assigned release factors were reviewed and agreed upon by a broad group of knowledgeable specialists within the sector organization (CEFIC, 2012). CEFIC (2012). Cefic Guidance Specific Environmental Release Categories (SPERCs) Chemical Safety Assessments, Supply Chain Communication and Downstream User Compliance. Revision 2, European Chemical Industry Council, Brussels, Belgium. http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/SPERCs-Specific-Envirnonmental-Release-Classes.pdf.	Y	N
	5.3.2 Release Factor – water			
	Numeric value / percent of input amount (Water):	1%	Y	Y
	Justification of RFs (Water):	The value was assigned using a mass balance approach that takes advantage of the sector knowledge and professional judgement of individuals within the expert group responsible for creating this SpERC factsheet. The determination employs an informed decision-making process that assumed complete release of the chemical substances to the environment. Mass partitioning of the release to air, water, and soil takes into consideration the default release factors associated with ERC 8a and 8d. The assigned release factors were reviewed and agreed upon by a broad group of knowledgeable specialists within the sector organization (CEFIC, 2012). CEFIC (2012). Cefic Guidance Specific Environmental Release Categories (SPERCs) Chemical Safety Assessments, Supply Chain Communication and Downstream User Compliance. Revision 2, European Chemical Industry Council, Brussels, Belgium. http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/SPERCs-Specific-Envirnonmental-Release-Classes.pdf.	Y	N
	5.3.3 Release Factor – soil			
	Numeric value / percent of input amount (Soil):	9%	Y	Y

FS Section	Content field	Explanation of content	CSR[1]	eSDS[2]
	Justification of RFs (Soil):	The value was assigned using a mass balance approach that takes advantage of the sector knowledge and professional judgement of individuals within the expert group responsible for creating this SpERC factsheet. The determination employs an informed decision-making process that assumed complete release of the chemical substances to the environment. Mass partitioning of the release to air, water, and soil takes into consideration the default release factors associated with ERC 8a and 8d. The assigned release factors were reviewed and agreed upon by a broad group of knowledgeable specialists within the sector organization (CEFIC, 2012). CEFIC (2012). Cefic Guidance Specific Environmental Release Categories (SPERCs) Chemical Safety Assessments, Supply Chain Communication and Downstream User Compliance. Revision 2, European Chemical Industry Council, Brussels, Belgium. http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/SPERCs-Specific-Envirnonmental-Release-Classes.pdf.	Y	N
	5.3.4 Release Factor – waste			
	Percent of input amount disposed as waste:	15%	Y	N
	Justification of RFs:	The value was derived from published information on the rate of generation rate of household hazardous waste (HHW) and the sales volume for formulated consumer products containing a volatile solvent. The production of HHW in the US was estimated to of 8.8 kg/person/yr (PSI, 2004). A survey of the sales volume for solvent-containing consumer products in California was 5944 tonnes/day and the total state population that same year was 39 million people (CARB, 2018). A ratio of the annual per capita HHW production rate with the annual per capita sales volume of volatile consumer products yielded a waste release factor of 15%. Since this value considers a large array of consumer products capable of producing a waste fraction that can vary considerably, an uncertainty factor has not been applied. PSI (2004). Paint Product Stewardship: A Background Report for the National Dialogue on Paint Product Stewardship. Product Stewardship Institute. Lowell, MA. https://cdn.ymaws.com/productstewardship.site-ym.com/resource/resmgr/Resources_-_PS-Products/Background_Report_for_the_Na.pdf. CARB (2018). Draft 2013, 2014, and 2015 Consumer & Commercial Product Survey Data Summaries. California Air Resources Board. Sacramento, CA. https://www.arb.ca.gov/consprod/survey/2013-2014-2015-data_release.htm.	Y	N
References to SPERC Background Document				
	Reference to Background Document	ESIG/ESVOC (2019). SpERC Background Document (1st draft). Specific Environmental Release Categories (SpERCs) for the consumer use of solvents and solvent-borne substances for agrochemical use, de-icing applications, and water treatment chemicals. European Solvents Industry Group. Brussels, Belgium.	Y	N

NOTE:
This SPERC covers biocidal products.

For solvents that are only used as co-formulants in plant protection products (PPP) please also consider the dedicated SpERCs developed by ECPA focused on the use as co-formulant in PPP (PC 27), which are available as ECPA REACH-IN Tools: ECPA SpERCs for co-formulants used in agrochemical plant protection products (PPP).

The main differences between the ESVOC SpERCs the ECPA SpERcs are:

- The ESVOC SpERC is aligned with the standard Tier 1 assessment while ECPA proposes their own tool for local assessment (LET approach);
- Regarding process categories, ESIG/ESVOC included more PROCs: e.g. for professional PROC1, PROC2, PROC4, PROC8a, PROC8b, PROC11, PROC13, PROC28, while ECPA Spray application of PPP containing co-formulants has PROC 8a and 11 only;
- In operational conditions ESIG considers more in detail wastewater emissions from equipment cleaning, while ECPA has *No intentional emission to surface water* or waste water is permitted;
- Finally, for the release factors ECPA proposes sub-SpERCs per vapor pressure bands, which is not considered in the ESVOC SpERC.