FS Section	Content field	Explanation of content	CSR[1]	eSDS[2]
1. Title	**1.1 Title of SPERC**	(Biocidal product in) Agrochemical use (professional): solvent-borne	Y	Y
	1.2 SPERC code	ESVOC SPERC 8.11a.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 professional use as an agrochemical excipient for application by manual or machine spraying, smokes and fogging; including equipment clean-downs and disposal.	Y	Y
	2.3 List of applicable Use Descriptors			
	LCS	PW – Widespread use by professional workers	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:	Unused and spent products and solutions should be appropriately labelled and stored for eventual recovery or disposal as hazardous waste. A suitable unbreakable and closable container should be used when storing and shipping hazardous materials. The containers must be solvent compatible, leakproof, and free of any defects. Contaminated debris such as disposable paper towels, brushes, rollers, masks, transfer vessels, and wipes that may contain small amounts of solvent residue need to be	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.

		handled as hazardous waste and properly disposed of in a manner that is consistent with local, regional, and national regulations. Direct disposal of waste into a municipal sewer system needs to conform with all applicable laws and regulations. A spill plan needs to be available that outlines the steps to be taken to minimize any potential health and environmental threats. EPA (2001). Managing Your Hazardous Waste: A Guide for Small Businesses. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. Washington, DC. https://www.epa.gov/sites/production/files/2014-12/documents/k01005.pdf.		
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 specifications.	Y	Y
	Reference for RMM Efficiency (air):	DPI&F (2005). Agricultural Chemical Users' Maual: Guidelines and Principles for Responsible Agricultural Chemical Use. The State of Queensland, Department of Primary Industriies and Fisheries. Brisbane, Australia. https://www.daf.qld.gov.au/__data/assets/pdf_file/0009/54738/AgChem-UsersManual.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 specifications.	Y	Y
	Reference for RMM Efficiency (soil):	DPI&F (2005). Agricultural Chemical Users' Maual: Guidelines and Principles for Responsible Agricultural Chemical Use. The State of Queensland, Department of Primary Industriies and Fisheries. Brisbane, Australia. https://www.daf.qld.gov.au/__data/assets/pdf_file/0009/54738/AgChem-UsersManual.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 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 8.11a.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
	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 parttiioning 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:	5%	Y	N
	Justification of RFs:	The value was derived from survey data that documented the annual loss of empty pesticide jugs, pails and drums after accounting for the returns to plastic recycling facilities in Ontario (WMCS, 2011). This value of 55 tonnes/yr was divided by the annual pesticide sales volume of 5403 tonnes/yr for application on fruit, vegetable, and field crops in Ontario (FFCO, 2015). An uncertainty factor of 5 has been applied to the resulting waste release factor of 1% since the survey did not account for the disposal of unused agricultural chemicals seeing widespread use. FFCO (2015). Survey of Pesticide Use in Ontario, 2013/2014: Estimates of Pesticides Used on Field Crops and Fruit and Vegetable Crops. Farm & Food Care Ontario Guelph. Ontario. http://www.farmfoodcareon.org/wp-content/uploads/2016/10/ONTARIO-Pesticide-Use-Survey-Final-2013.pdf. WMCS (2011). Ontario Agricultural Waste Characterization Study. Waste Management Consulting Services. London, Ontario. https://cleanfarms.ca/wp-content/uploads/2017/07/OntarioAgWasteCharacterizationReport_FINAL_20110606.pdf.	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 professional use of solvents and solvent-borne substances for agrochemical use, polymer processing, and water treatment chemicals.	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.