

| FS Section | Content field | Explanation of content | CSR ¹ | eSDS ² |
|---------------------------|---|---|------------------|-------------------|
| 1. Title | 1.1 Title of SPERC | Binders and release agents (professional): solvent-borne | Y | Y |
| | 1.2 SPERC code | ESVOC SPERC 8.10b.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 use as binders and release agents including material transfers, mixing, application by spraying, brushing, and handling of waste. | Y | Y |
| | 2.3 List of applicable Use Descriptors | | | |
| | LCS | PW – Widespread use by professional workers | Y | Y |
| | SU | SU0 - Other | Y | Y |
| | PC | PC24 – Lubricants, greases, release 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 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 | 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 ECom catalogue when available. When no phrase is available yet in the catalogue the proposed phrase can be reported here.

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| | | 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 accepted practices and the manufacturers' instructions. | Y | Y |
| | Reference for RMM Efficiency (air): | USEPA (1996). Evaluation of Pollution Prevention Opportunities for Mold Release Agents. EPA/600/SR-96/075, U.S. Environmental Protection Agency, National Risk Management Research Laboratory. Research Triangle Park, NC. https://nepis.epa.gov/Exe/ZyPDF.cgi/P1000i81.PDF?Dockey=P1000i81.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 Simple Treat 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): | USEPA (1996). Evaluation of Pollution Prevention Opportunities for Mold Release Agents. EPA/600/SR-96/075, U.S. Environmental Protection Agency, National Risk Management Research Laboratory. Research Triangle Park, NC. https://nepis.epa.gov/Exe/ZyPDF.cgi/P1000i81.PDF?Dockey=P1000i81.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) | 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 |

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| | | 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 8.10b.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) | 95% | 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. 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-Environmental-Release-Classes.pdf . | Y | N |
| 5.3.2 Release Factor – water | | | | |
| | Numeric value / percent of input amount (Water): | 2.5% | 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. 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-Environmental-Release-Classes.pdf . | Y | N |
| 5.3.3 Release Factor – soil | | | | |
| | Numeric value / percent of input amount (Soil): | 2.5% | 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 | Y | N |

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| | | <p>factsheet. The determination employs an informed decision-making process that assumed complete release of the chemical substances to the environment. 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).</p> <p>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.</p> <p>http://www.cefic.org/Documents/IndustrySupport/REACH-Implementation/Guidance-and-Tools/SPERCs-Specific-Environmental-Release-Classes.pdf.</p> | | |
| 5.3.4 Release Factor – waste | | | | |
| | Percent of input amount disposed as waste: | 3% | Y | N |
| | Justification of RFs: | <p>The waste factor was cited in a life cycle assessment for the production of concrete masonry from Portland cement (PCA, 2007). The production process requires the application of a releasing agent to the concrete forms to facilitate separation of the masonry block. The value of 3.0% includes the waste resulting from the production of concrete blocks using molds that have been coated with a form parting oil. This factor has not been adjusted since it provides an upper limit for the amount of binder or releasing agent that would be disposed of as waste during widescale professional use of these products</p> <p>PCA (2007). Life Cycle Inventory of Portland Cement Concrete. PCA R&D Serial No. 3007 Portland Cement Association. Skokie, IL.</p> <p>http://www.nrmca.org/taskforce/item_2_talkingpoints/sustainability/sustainability/sn3011%5B1%5D.pdf.</p> | Y | N |
| References to SPERC Background Document | | | | |
| | Reference to Background Document | <p>ESIG/ESVOC (2019). SpERC Background Document (1st draft). Specific Environmental Release Categories (SpERCs) for the professional use of solvents and solvent-borne substances as binding agents, cleaning agents, and functional fluids. European Solvents Industry Group. Brussels, Belgium.</p> | Y | N |