

| - FS Section | Content field | Explanation of content | CSR ¹ | eSDS ² | |
|---------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|--|
| 1. Title | 1.1 Title of SPERC | Coating use (professional): solvent-borne | Y | Y | |
| | 1.2 SPERC code | ESVOC SPERC 8.3b.v2 | Υ | Y | |
| | 2.1 Substance/Product Domain | | | | |
| 2. Scope | 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 in coatings (paints, inks, adhesives, etc.) including exposures during use (including materials receipt, storage, preparation and transfer from bulk and semi-bulk, application by spray, roller, brush, spreader by hand or similar methods, and film formation) and equipment cleaning, maintenance and associated laboratory activities. | Y | Y | |
| | 2.3 List of applicable Use Descriptors | | | | |
| | LCS | PW – Widespread use by professional workers | Y | Y | |
| | su | SU0 - Other | Υ | Υ | |
| | PC | PC9a – Coatings and paints, thinners, paint removers | Y | Υ | |
| | 3.1 Conditions of use | | | | |
| 3. Operational conditions | Location of use | Indoor/Outdoor | Υ | Y | |
| | Water contact during use | Yes | Υ | 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 | 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.



| | | 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. | | ,, |
| | RMM limiting release to air: | No obligatory RMMs. | Y | Y |
| 4. Obligatory RMMs onsite | RMM Efficiency (air): | Emissions to air are minimized when the product is used in accordance with the manufacturers' instructions and / or the established practices | Υ | Υ |
| | Reference for RMM Efficiency (air): | AEA, 2025. Recommendations for De-icing/Anti-icing Aeroplanes on the Ground. Association of European Airlines. Brussels, Belgium. https://skybrary.aero/bookshelf/books/2869.pdf. | Υ | 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 m³/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. | Υ | Υ |
| | RMM Efficiency (soil): | Emissions to soil are minimized when the product is used in accordance with the manufacturers' instructions and / or the established practices | Υ | Υ |
| | Reference for RMM Efficiency (soil): | AEA, 2025. Recommendations for De-icing/Anti-icing Aeroplanes on the Ground. Association of European Airlines. Brussels, Belgium. https://skybrary.aero/bookshelf/books/2869.pdf. | Y | N |
| | 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) | Υ | N |
| | Fraction of Regional tonnage used locally: | 0.05% (default value) | Y | N |
| 5. Exposure Assessment Input | 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 8.3b.v2 | Υ | N |



| | ERC | ERC 8a ERC 8d | | | |
|--|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|---|--|
| | sub-SPERC applicability: | None | Υ | N | |
| | 5.3.1 Release Factor – air | | | | |
| | Numeric value / percent of input amount (Air) | 98% | Y | Y | |
| | Justification of RFs (Air): | The value was assigned using a mass balance approach that relied on air emission values provided in an Emission Scenario Document for a group of five different solvent-based coatings used in industrial, professional, or consumer applications (OECD, 2009). The air release associated with the professional use of a decorative coating was used without any further adjustment or modification. OECD (2009). Emission Scenario Document on Coating Industry (Paints. Laquers and Varnishes). No. 22, Organisation for Economic Co-operation and Development. Paris, France. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=env/fim/mono(2009)24&doclanguage=en . | Y | N | |
| | 5.3.2 Release Factor – water | | | | |
| | Numeric value / percent of input amount (Water): | 1% The value was assigned using a mass balance approach that relied on | Y | Y | |
| | Justification of RFs (Water): | water emission values provided in an Emission Scenario Document for a group of five different solvent-based coatings used in industrial, professional, or consumer applications (OECD, 2009). The water release associated with the consumer use of a decorative coating was used as provided without any further adjustment or modification. OECD (2009). Emission Scenario Document on Coating Industry (Paints. Laquers and Varnishes). No. 22, Organisation for Economic Co-operation and Development. Paris, France. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=e nv/im/mono(2009)24&doclanguage=en. | Y | N | |
| | 5.3.3 Release Factor – soil | | | | |
| | Numeric value / percent of input amount (Soil): | 1% | Υ | Υ | |
| | Justification of RFs (Soil): | The release to soil was designed to preserve the mass balance following the identification of appropriate air and water release factors. Mass partitioning of the release to air, water, and soil ensures that all emissions are accounted for in a well-reasoned and scientifically-justified manner. OECD (2009). Emission Scenario Document on Coating Industry (Paints. Laquers and Varnishes). No. 22, Organisation for Economic Co-operation and Development. Paris, France. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=en_v/im/mono(2009)24&doclanguage=en. | Y | N | |
| | 5.3.4 Release Factor – waste | | | | |
| | Percent of input amount disposed as waste: | 2% | Υ | N | |
| | Justification of RFs: | The waste generation factor was taken from an Emission Scenario Document (ESD) for the professional application of a decorative coating (OECD, 2009). The factor represents the amount of solvent waste that remains unused in the paint can and the waste that remains on the brushes and rollers following application. An adjustment factor has not been applied to this value since the assessment is representative of use conditions associated with a wide range of professional cleaning products. OECD (2009). Emission Scenario Document on Coating Industry (Paints. Laquers and Varnishes). No. 22, Organisation for Economic Co-operation and Development. Paris, France. http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=env/jm/mono(2009)24&doclanguage=en. | Y | N | |





ESIG SPERC Factsheet – Coating use (professional)

| 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 as binding agents, coatings, cleaning agents, and functional fluids. European Solvents Industry Group. Brussels, Belgium. | Y | N | |

(OECD, 2009)