

FS Section	Content field	Explanation of content
1. Title	1.1 Title of SPERC	Formulation of powder coatings
	1.2 SPERC codes:	CEPE SPERC 2.3a.v2 Formulation of powder coatings and inks – non volatiles
2. Scope	2.1 Substance/Product Domain	
	Substance types / functions / properties included or excluded:	Includes: Particulates Non-volatiles
	Additional specification of product types covered:	
	Inclusion of sub-SPERCs: y/n	No
	2.2 Process domain	
	Description of activities/processes:	Covers the whole process of formulation/manufacture of powder coatings.
	2.3 List of applicable UD	
	LCS:	F (Formulation or re-packing)
SU:	n/a	
PC:	9a	
3. Operational conditions (including information on technical strategies to achieve high raw material efficiency)	3.1 Conditions of use	
	Location of use:	Indoor
	Water contact during use: y/n	Y
	Connected to a standard municipal biological STP: y/n	Y
	Rigorously contained system with minimisation of release to the environment: y/n	N
	Further operational conditions impacting on releases to the environment.	Process efficiency: maximise the efficiency of use of input raw materials through the highest conversion into formulated products
	3.2 Waste Handling and Disposal	
	Waste Handling and Disposal:	Process waste may be recycled or incinerated by waste disposal company
4. Obligatory RMMs onsite	RMM limiting release to air:	Cyclone and bag filters
	RMM Efficiency (air): numerical value	0.99
	Reference for RMM Efficiency (air):	EMISSION SCENARIO DOCUMENT ON COATINGS INDUSTRY – ESD - (PAINTS, LACQUERS AND VARNISHES), OECD, July 2009 http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/JM/MONO(2009)24&doclanguage=en (tables 4.7 & 5.10)
	RMM limiting release to water:	Not applicable
	RMM Efficiency (water): numerical value	Not applicable
	Reference for RMM Efficiency (water):	Not applicable

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	RMM limiting release to soil:	Not applicable												
	RMM Efficiency (soil): numerical value	Not applicable												
	Reference for RMM Efficiency (soil):	Not applicable												
5. Exposure Assessment Input	5.1 Substance use rate													
	Amount of substance use per day: numerical value	<p>Typical maximum daily usage, for any one substance, based on sector knowledge 101 000 kg product/day at any one location</p> <p><i>Note: in many coatings and inks manufacturing facilities, usage rates will be substantially below the figures shown</i></p> <table border="1"> <thead> <tr> <th>Substance function</th> <th>Daily substance use rate in kg/d</th> </tr> </thead> <tbody> <tr> <td>Pigment/extender/filler</td> <td>50 000</td> </tr> <tr> <td>Binder</td> <td>50 000</td> </tr> <tr> <td>Water</td> <td>0</td> </tr> <tr> <td>Organic solvent/coalescent</td> <td>0</td> </tr> <tr> <td>Additives</td> <td>1 000</td> </tr> </tbody> </table>	Substance function	Daily substance use rate in kg/d	Pigment/extender/filler	50 000	Binder	50 000	Water	0	Organic solvent/coalescent	0	Additives	1 000
	Substance function	Daily substance use rate in kg/d												
	Pigment/extender/filler	50 000												
	Binder	50 000												
	Water	0												
	Organic solvent/coalescent	0												
	Additives	1 000												
	Fraction of EU tonnage used in region: numerical value	Not relevant as not widespread use												
	Fraction of Regional tonnage used locally: numerical value	Not relevant as not widespread use												
	Justification / information source:													
	5.2 Days emitting													
	Number of emission days per year: numerical value	Continuous release: 225 d/y												
	Justification / information source:	Typical industry situation (5 working days a week, shut down for vacation, no need for continuous shift)												
	5.3 Release factors													
	SPERC identifier:	CEPE SPERC 2.3a.v2												
	ERC:	2												
	sub-SPERC applicability:	Formulation of powder coatings and inks – non-volatiles												
	5.3.1 Release Factor – air													
	Numeric value / percent of input amount (Air): numerical value	0.08%												
Justification of RFs (Air):	No direct dust emissions to the air are expected. Initial loss from handling of non-volatile substances is captured by air extraction devices. Emission limits from the EMISSION SCENARIO DOCUMENT ON COATINGS INDUSTRY (PAINTS, LACQUERS AND VARNISHES), OECD, July 2009 - ESD [http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=ENV/JM/MONO(2009)24&doclanguage=en]													
5.3.2 Release Factor – water														
Numeric value / percent of input amount (Water): numerical value	0.52%													
Justification of RFs (Water):	Emissions via equipment cleaning and subsequent discharge to wastewater. ESD													
5.3.3 Release Factor – soil														
Numeric value / percent of input amount (Soil): numerical value	0.00													
Justification of RFs (Soil):	ESD													
5.3.4 Release Factor – waste														

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	Percent of input amount disposed as waste: numerical range	4.7%
	Justification of RFs:	ESD