

Section	Content		
<b>SPERC Title</b>	Wide dispersive use of adhesives and sealants by professional users and consumers		
<b>SPERC code</b>			
	FEICA SPERC 8a.3.v2 - Wide dispersive Use of Solvents in Adhesives and Sealants FEICA SPERC 8c.3.v2- Wide dispersive Use of Substances other than Solvents in Adhesives and Sealants		
<b>Scope</b>			
	<p>Covers the application of adhesives and sealants for a wide range of purposes by consumers and by professional uses. Covers different adhesive and sealant application techniques such as brushing or rolling, spraying, dipping, extrusion from a cartridge. Indoor and outdoor uses are considered. No distinction is made between water-borne and solvent borne adhesives and sealants. As a result, the release of solvents to water from the use of solvent-borne adhesives and sealants is overestimated.</p> <p>Outdoor uses typically are uses in construction applications. These are covered by the SPERCs authored by EFCC.</p> <p>Substance Domain: FEICA SPERC 8a.3.v2 Solvents and volatiles which quantitatively evaporate upon curing of the adhesive/ sealants. FEICA SPERC 8c.3.v2 All substances which do not evaporate to a significant extent upon curing of the adhesive/sealants.</p>		
<b>Related use descriptors</b>			
	Main User Group: SU21, SU22		
	Sector of Use: see Main User Group		
	Environmental Release Class: ERC 8a, ERC 8c		
	Process Categories: PROC 5, PROC8a, PROC8b, PROC 9, PROC 10, PROC11, PROC 13		
	Product categories: PC 1		
<b>Operational conditions</b>	<b>Operational conditions – Phrases</b>		
	FEICA 8a.3.v2	Professional and Consumer product use leading to emission of volatiles to air	
	FEICA 8c.3.v2	Professional and Consumer Product leading to embedding substances into a matrix.	
	<b>Operational conditions - Free text background</b>		
	FEICA 8a.3.v2	Upon curing, substances evaporate to the ambient air.	
	FEICA 8c.3.v2	Upon curing, substances are included into matrix without intended release to the environment.	
<b>Obligatory onsite RMMs</b>	<b>RMM – Phrase</b>		<b>RMM-Efficiency (RE<sub>SPERC</sub>)</b>
	FEICA 8a.3.v2	Professional and Consumer product use with limited or no technical control of emission	0
	FEICA 8c.3.v2		0

<b>Substance use rate</b>	<b>Phrase</b>		<b>Value</b>		
	FEICA 8a.3.v2	Fraction of EU tonnage used in region: to be assessed by registrant	None specified		
		Fraction of Regional tonnage used locally:	0.002		
	FEICA 8c.3.v2	Fraction of EU tonnage used in region: to be assessed by registrant	None specified		
		Fraction of Regional tonnage used locally:	0.002		
	<b>Justification</b>				
<p>The value of the Fraction of Regional tonnage used locally is identical to the default settings of the REACH Guidance.</p> <p>The fraction of EU tonnage used in region is not specified in this SPERC factsheet. The respective value needs to be defined by the registrant based on his intelligence of the market of the substance.</p>					
<b>Days emitting</b>	<b>Phrase</b>		<b>Value</b>		
	FEICA 8a.3.v2	Emission Days (days/year):	365		
	FEICA 8c.3.v2		365		
<b>Release factors</b>	<b>Values (per pathway)</b>				
		To air	To water	To soil	To waste
	FEICA 8a.3.v2	0.98	0.015	0	0
	FEICA 8c.3.v2	0	0.015	0	0
<b>Justification</b>					

	<p>Regarding environmental emissions, the wide dispersive use use of adhesives and sealants is very similar to related wide dispersive uses of paints, lacquers and varnishes.</p> <p>For FEICA 8a.3.v2 (i.e. for volatiles in adhesives and sealants) the release fractions defined in the OECD Emission Scenario Document for decorative paints in professional and general public use were used. . The OECD Emission Scenario Document specifies two release factors to water, 0 for professional users, 0.015 (i.e. 1.5%) for the general public. The value of 1.5% was used. The release of 1.5% reflects the emissions originating from equipment cleaning with water. This release factor is applied as worst case approximation to solvent-borne and water-borne adhesives and paints. The release factor to air for FEICA 8c.3b.v2 (i.e. for volatiles in water-borne adhesives and sealants) is were approximated on the basis of the release factor defined for decorative paints in professional use and in general public use. The corresponding release factor to air is set to 98% following the OECD Emission Scenario Document.</p> <p>For FEICA 8c.3.v2 (i.e. for substances other than solvents volatiles in adhesives and sealants) the release fractions defined in the OECD Emission Scenario Document for decorative paints in professional and general public use were used. The OECD Emission Scenario Document specifies two release factors to water, 0 for professional users, 0.015 (i.e. 1.5%) for the general public. The value of 1.5% was used. The release of 1.5% reflects the emissions originating from equipment cleaning with water. This release factor is applied as worst case approximation to solvent-borne and water-borne adhesives and paints. The release factor to air is set to 0.</p> <p>OECD Emission Scenario Document Series Nr. 22, Coating Industry (Paints, Lacquers and Varnishes), July 2009</p>					
<b>Optional risk management measures</b>	<table border="1"> <thead> <tr> <th data-bbox="434 1115 662 1238">Type of RMM</th> <th data-bbox="662 1115 1225 1238">Efficiency</th> </tr> </thead> <tbody> <tr> <td data-bbox="434 1238 662 1317">FEICA 8a.3.v2 FEICA 8c.3.v2</td> <td data-bbox="662 1238 1225 1317">Professional and Consumer product use with limited or no technical control of emission</td> </tr> </tbody> </table>		Type of RMM	Efficiency	FEICA 8a.3.v2 FEICA 8c.3.v2	Professional and Consumer product use with limited or no technical control of emission
Type of RMM	Efficiency					
FEICA 8a.3.v2 FEICA 8c.3.v2	Professional and Consumer product use with limited or no technical control of emission					
<b>Narrative description</b>	<p><b>Wide dispersive use of adhesives and sealants by professional users and consumers</b></p>					
	<p>This SPERC describes SPERC parameters relevant to the wide dispersive use of adhesives and sealants by professional users and consumers. Adhesives and sealants are applied between two substrates. Different application techniques such as brushing or rolling, spraying, dipping, extrusion from a cartridge can be used.</p> <p>Upon application curing takes place either via a chemical reaction or via evaporation of a solvent. The solvent can be water or an organic volatile substance.</p> <p>Hence, volatile substances are released deliberately to the air. The non-volatiles substances are left behind in the matrix which has been formed between the substrates between the two substrates.</p> <p>Upon curing, a matrix is formed between the two substrates and the life-cycle stage of adhesive/sealant application is concluded.</p>					
<b>Scaling</b>						
	<p>Not applicable for wide dispersive uses.</p>					

## Appendix - Determinant Lists

### FEICA SPERC 8a.3.v2 - Wide dispersive Use of Solvents in Professional and DIY Adhesives and Sealants

Determinant Label	Quali-/Quantitative	Value	Description of Value	Standard Phrase	Efficiency -if applicable
Type of Process	Qual	Application of solvent borne or water-borne products		Application of solvent borne or water-borne products	
Indoor/outdoor use	Qual	Covers Indoor and Outdoor Use		Covers Indoor and Outdoor Use	
Equipment cleaning	Qual	Equipment cleaned with water, washing disposed of with wastewater.		Equipment cleaned with water, washing disposed of with wastewater.	
Process efficiency	Qual	Process with efficient use of raw materials.	Typically implemented measures for reducing emissions to waste water may include: - Closed batch systems	Process with efficient use of raw materials.	

## FEICA SPERC 8c.3.v2- Wide dispersive Use of Substances other than Solvents in Professional and DIY Adhesives and Sealants

Determinant Label	Quali-/ Quantitative	Value	Description of Value	Standard Phrase	Efficiency -if applicable
Type of Process	Qual	Application of solvent borne or water-borne products		Application of solvent borne or water-borne products	
Indoor/outdoor use	Qual	Covers Indoor and Outdoor Use		Covers Indoor and Outdoor Use	
Equipment cleaning	Qual	Equipment cleaned with water, washing disposed of with wastewater.		Equipment cleaned with water, washing disposed of with wastewater.	
Process efficiency	Qual	Process with efficient use of raw materials.	Typically implemented measures for reducing emissions to waste water may include: - Closed batch systems	Process with efficient use of raw materials.	