### 1. Title

1.1 Formulation of Solvent-borne and Solvent-less Adhesives / Sealants and Construction Chemical Products—volatile Substances (Small Scale, < 1500 t/a of products)

1.2 FEICA / EFCC SPERC 2.1c.v3

### 2. Scope

2.1 Substance/Product Domain

Substance types / functions / properties included or excluded: Includes volatile substances which evaporate to a significant extent upon curing of the adhesives. Volatile ingredients are defined by a boiling point threshold of \(<250°C\).

Additional specification of product types covered: none

Inclusion of sub-SPERCs: none

2.2 Process domain

Description of activities/processes: storing, mixing, packaging, filling of substances (as part of preparations) and equipment cleaning, maintenance and associated laboratory activities; Solvent based process

2.3 List of applicable Use Descriptors

LCS: F

SU: 0

PC: 1, 9a, 9b

### 3. Operational conditions

3.1 Conditions of use

Location of use: indoor

Water contact during use: n

Connected to a standard municipal biological STP: y

Rigorously contained system with minimisation of release to the environment: n

Further operational conditions impacting on releases to the environment:

- Automation in raw materials handling (manual / automatic dosing): High degree of automation in adhesive / sealant formulation
- Measures to achieve efficient raw material use (e.g. water re-use, recovery of substances from waste etc.): The manufacture of adhesive chemicals is a multi-stage batch process. The process is arranged to maximise the efficiency of use of input raw materials, through the highest conversion into formulated products.
- Conditions preventing emissions to air: Use of closed or covered manufacturing equipment to minimise evaporative losses of VOCs. Use of general and manufacturing plant extraction to maintain emissions of airborne VOCs below the levels permitted by 1999/13/EG.

3.2 Waste Handling and Disposal

Waste Handling and Disposal:
- Equipment cleaned with organic solvent, washings are collected and disposed of as solvent waste.

### 4. Obligatory RMMs onsite

RMM limiting release to air: none

RMM Efficiency (air): n/a

Reference for RMM Efficiency (air): n/a

RMM limiting release to water: none

RMM Efficiency (water): n/a

Reference for RMM Efficiency (water): n/a

RMM limiting release to soil: none

RMM Efficiency (soil): n/a

Reference for RMM Efficiency (soil): n/a

### 5. Exposure Assessment Input

5.1 Substance use rate

Amount of substance use per day: The indicative worst case substance use rate (\(M_{\text{SPERC}}\)) for several ingredient types and guidance for refinement can be found in background documentation.

Fraction of EU tonnage used in region: n/a

Fraction of Regional tonnage used locally: n/a

### FS Section | Content field
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5.2 Days emitting | Number of emission days per year: 300
Justification / information source: FEICA / EFCC (2017). Specific Environmental Release Categories (SPERCs) for the formulation of adhesives and sealants and construction chemical products

### 5.3 Release factors
| sub-SPERC identifier | n/a |
| sub-SPERC applicability | n/a |

#### 5.3.1 Release Factor – air
Numeric value / percent of input amount (Air): 3.6%

#### 5.3.2 Release Factor – water
Numeric value / percent of input amount (Water): 0%

#### 5.3.3 Release Factor – soil
Numeric value / percent of input amount (Soil): 0%

#### 5.3.4 Release Factor – waste
Percent of input amount disposed as waste: 0.2 - 3%

### References to SPERC Background Document
FEICA / EFCC (2017). Specific Environmental Release Categories (SPERCs) for the formulation of adhesives and sealants and construction chemical products.

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1 The objective of this factsheet is to summarize the SPERC key facts provided in the corresponding SPERC background documents. It gives an overview of the SPERC essentials for the chemical safety assessment. A SPERC background document is a reference document, which provides the description of the emission situation(s) for a use specified by an industrial sector, the justification and applicability domain of the environmental release factors, and the references/information sources/methods used in the derivation of the release factors.