

FS Section	Content field
1. Title	1.1 Industrial use of Water-borne Processing Aids
	1.2 AISE SPERC 4.1.v3
2. Scope	2.1 Substance/Product Domain
	Substance types / functions / properties included or excluded: Substances used as processing aids in the chemical industries not becoming part the article
	Additional specification of product types covered: Processing aids as defined covers substances in a broad range of specific applications, e.g. industrial laundry, car washing, boat cleaning, process cleaning, CIP cleaning, surface cleaning
	Inclusion of sub-SPERCs: n
	2.2 Process domain
	Description of activities/processes: Industrial uses of aqueous process solution comprise of preparation of baths and automated cleaning steps prior to any on-site RMM. Spent process fluid is discharged to wastewater.
	2.3 List of applicable Use Descriptors
	LCS: IS
	SU: 0
	PC: 35
3. Operational conditions	3.1 Conditions of use
	Location of use: indoor
	Water contact during use: y
	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. Industrial applications of water borne processing aids vary in daily consumption of application fluid, product concentrations and product dilutions. They can typically be described by the following conditions:
	<ul style="list-style-type: none"> • The application fluid is kept in a reservoir. The fluid is pumped to dedicated machine(s) in order to be applied to the substrate or it is kept in a treatment bath (e.g. vehicle cleaning, metal working fluids, etc.). With each piece of substrate a fraction of the application fluid is carried-over from the treatment bath. Via a sequence of rinsing steps this fraction of the application fluid is continuously emitted to the wastewater. The reservoir is continuously replenished.
	<ul style="list-style-type: none"> • The application fluid in the reservoir can be disposed of periodically: This may or may not involve on-site pre-treatment or disposal to the wastewater. As a result, constituents of the application fluid are removed during the on-site treatment according to the efficiency of the selected emission reduction. In addition, raw materials may be recovered. The choice of suitable emission reduction technology depends on the process.
	<ul style="list-style-type: none"> • Closed system with regards to emissions to the environment. Spent application fluid is not released to the environment. It is disposed of periodically as waste (with or without prior treatment). This type of application includes several surface finishing, water conditioning etc. applications. No emissions to the wastewater occur. The local waste handling regulations have to be followed. Additional instructions for handling waste may be included in the safety data sheet.
	<ul style="list-style-type: none"> • Optimized water use due to e.g.: Re-use of rinsing water
4. Obligatory RMMs onsite	3.2 Waste Handling and Disposal
	Waste Handling and Disposal: Product residues are disposed with industrial waste. Empty large containments (e.g. IBC) are returned to the manufacturer.
	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

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5. Exposure Assessment Input	5.1 Substance use rate
	Amount of substance use per day: The indicative worst case substance use rates (M_{SPERC}) of several ingredient types and guidance for refinement can be found in the AISE background documentation.
	Fraction of EU tonnage used in region: n/a
	Fraction of Regional tonnage used locally: n/a
	Justification / information source: cf. AISE Background document
	5.2 Days emitting
	Number of emission days per year: 300
	Justification / information source: cf. AISE Background document
	5.3 Release factors
	sub-SPERC identifier: n/a
	ERC: 4
	sub-SPERC applicability: n/a
	5.3.1 Release Factor – air
	Numeric value / percent of input amount (Air): 0%
	Justification of RFs (Air): cf. AISE Background document
	5.3.2 Release Factor – water
	Numeric value / percent of input amount (Water): 100%
	Justification of RFs (Water): cf. AISE Background document
	5.3.3 Release Factor – soil
	Numeric value / percent of input amount (Soil): 0%
	Justification of RFs (Soil): cf. AISE Background document
	5.3.4 Release Factor – waste
	Percent of input amount disposed as waste: 0-1%
	Justification of RFs: cf. AISE Background document
References to SPERC Background Document ¹	
	Ref. A.I.S.E., International Association for Soaps, Detergents and Maintenance Products. 2020. Specific Environmental Release Categories (SPERCs) for the Industrial use of Water-borne Processing Aids

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.