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1. OVERVIEW OF EXPOSURE SCENARIOS

Table 1. Overview on exposure scenarios and coverage of substance life cycle

ES number	Short description of exposure scenario	Resulting life cycle stage						Sector of use (SU)	Process Category (PROC)	Product Category (PC)	Article Category (AC)	Environmental Release Category (ERC)	Volume (tonnes)
		Manufacture	Formulation	End use			Service life (for articles)						
				Industrial	Professional	Consumer							
1	Manufacture of substance	x						1, 2, 3					
2	Charging and discharging of substances and mixtures		x					8A, 8B, 9					
3	Formulation of preparations		x					1, 2, 3, 5					
4	Use as intermediate			x				1, 2, 3					
5	Use as Monomer in Polymerisation reactions			x				1, 2, 3					
6	Use in Coatings			x				7, 10					
7	Use in laboratories			x				15					

Table 2: General product characteristics

Product characteristics	
Physical state	liquid
Concentration in substance	100 % (except indicated otherwise)
Fugacity / Dustiness	low

1.1 Environmental exposure

In the chemical safety assessment performed according to Article 14(3) in connection with Annex I section 3 (Environmental Hazard Assessment) and section 4 (PBT/ vPvB Assessment) no hazard was identified. Therefore according to REACH Annex I (5.0) exposure estimation is not necessary. Consequently all identified uses of the substance are assessed as safe for the environment.

2. EXPOSURE SCENARIO 1: MANUFACTURE OF SUBSTANCE

2.1 Human Health

2.1.1 Description of ES 1

Free short title	Manufacture of substance
Systematic title based on use descriptor	PROC 1, 2, 3
Name(s) of contributing worker scenarios and corresponding PROCs	PROC 1 - Use in closed process, no likelihood of exposure PROC 2 - Use in closed, continuous process with occasional controlled exposure PROC 3 - Use in closed batch process (synthesis or formulation)

2.1.2 Contributing Scenario ES1-CS1: Control industrial worker exposure for PROC 1

Name of contributing scenario	1 - Use in closed process, no likelihood of exposure
Qualitative Risk Assessment	
General	Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	outdoors (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	no
Respiratory protection	no

2.1.3 Contributing Scenario ES1-CS2: Control industrial worker exposure for PROC 2

Name of contributing scenario	2 - Use in closed, continuous process with occasional controlled exposure
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	480 cm ²
Other given operational conditions affecting workers exposure	
Location	outdoors (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

2.1.4 Contributing Scenario ES1-CS3: Control industrial worker exposure for PROC 3

Name of contributing scenario	3 - Use in closed batch process (synthesis or formulation)
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.

Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

3. EXPOSURE SCENARIO 2: CHARGING AND DISCHARGING OF SUBSTANCES AND MIXTURES

3.1 Human Health

3.1.1 Description of ES 2

Free short title	Charging and discharging of substances and mixtures
Systematic title based on use descriptor	PROC 8A, 8B, 9
Name(s) of contributing worker scenarios and corresponding PROCs	<p>PROC 8a - Transfer of chemicals from/to vessels/ large containers at non dedicated facilities</p> <p>PROC 8b - Transfer of chemicals from/to vessels/ large containers at dedicated facilities</p> <p>PROC 9 - Transfer of chemicals into small containers (dedicated filling line)</p>

3.1.2 Contributing Scenario ES2-CS1: Control industrial worker exposure for PROC 8A

Name of contributing scenario	8a - Transfer of chemicals from/to vessels/ large containers at non dedicated facilities
Qualitative Risk Assessment	
General	<p>In case of potential exposure: Wear suitable respiratory protection.</p> <p>In case no respiratory protection is used: Use a local exhaust ventilation with adequate effectiveness. Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.</p>
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	960 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	enhanced (70%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	

Protective gloves	98 %, burst-time: >4 hours (default) (<i>justification: Wear chemically resistant gloves in combination with intensive management supervision control.</i>)
Respiratory protection	90 %
Required effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

3.1.3 Contributing Scenario ES2-CS2: Control industrial worker exposure for PROC 8B

Name of contributing scenario	8b - Transfer of chemicals from/to vessels/ large containers at dedicated facilities
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	960 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	98 %, burst-time: >4 hours (default) (<i>justification: Wear chemically resistant gloves in combination with intensive management supervision control.</i>)
Respiratory protection	no
Required effectiveness of LEV	inhalation: 99.6 % (<i>justification: required effectiveness of LEV</i>)

3.1.4 Contributing Scenario ES2-CS3: Control industrial worker exposure for PROC 9

Name of contributing scenario	9 - Transfer of chemicals into small containers (dedicated filling line)
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	480 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	98 %, burst-time: >4 hours (default) (<i>justification: Wear chemically resistant gloves in combination with intensive management supervision control.</i>)
Respiratory protection	no
Required effectiveness of LEV	inhalation: 99.5 % (<i>justification: required effectiveness of LEV</i>)

4. EXPOSURE SCENARIO 3: FORMULATION OF PREPARATIONS

4.1 Human Health

4.1.1 Description of ES 3

Free short title	Formulation of preparations
Systematic title based on use descriptor	PROC 1, 2, 3, 5
Name(s) of contributing worker scenarios and corresponding PROCs	<p>PROC 1 - Use in closed process, no likelihood of exposure</p> <p>PROC 2 - Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3 - Use in closed batch process (synthesis or formulation)</p> <p>PROC 5 - Mixing or blending in batch processes (multistage and/or significant contact)</p>

4.1.2 Contributing Scenario ES3-CS1: Control industrial worker exposure for PROC 1

Name of contributing scenario	1 - Use in closed process, no likelihood of exposure
Qualitative Risk Assessment	
General	Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	No
Respiratory protection	no

4.1.3 Contributing Scenario ES3-CS2: control industrial worker exposure for PROC 2

Name of contributing scenario	2 - Use in closed, continuous process with occasional controlled exposure
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	480 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

4.1.4 Contributing Scenario ES3-CS3: Control industrial worker exposure for PROC 3

Name of contributing scenario	3 - Use in closed batch process (synthesis or formulation)
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.

Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

4.1.5 Contributing Scenario ES3-CS4: Control industrial worker exposure for PROC 5

Name of contributing scenario	5 - Mixing or blending in batch processes (multistage and/or significant contact)
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no respiratory protection is used: Use a local exhaust ventilation with adequate effectiveness (95%). Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	35 %, concentration has been considered linearly (<i>justification: Maximal concentration to be used.</i>)
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	480 cm ²
Other given operational conditions affecting workers exposure	

Location	indoors
Ventilation	enhanced (70%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	95 %

5. EXPOSURE SCENARIO 4: USE AS INTERMEDIATE

5.1 Human Health

5.1.1 Description of ES 4

Free short title	Use as intermediate
Systematic title based on use descriptor	PROC 1, 2, 3
Name(s) of contributing worker scenarios and corresponding PROCs	<p>PROC 1 - Use in closed process, no likelihood of exposure</p> <p>PROC 2 - Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3 - Use in closed batch process (synthesis or formulation)</p>

5.1.2 Contributing Scenario ES4-CS1: Control industrial worker exposure for PROC 1

Name of contributing scenario	1 - Use in closed process, no likelihood of exposure
Qualitative Risk Assessment	
General	Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	No
Respiratory protection	no

5.1.3 Contributing Scenario ES4-CS2: Control industrial worker exposure for PROC 2

Name of contributing scenario	2 - Use in closed, continuous process with occasional controlled exposure
Qualitative Risk Assessment	

General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	480 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

5.1.4 Contributing Scenario ES4-CS3: Control industrial worker exposure for PROC 3

Name of contributing scenario	3 - Use in closed batch process (synthesis or formulation)
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	

Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Required effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

6. EXPOSURE SCENARIO 5: USE AS MONOMER IN POLYMERISATION REACTIONS

6.1 Human Health

6.1.1 Description of ES 5

Free short title	Use as Monomer in Polymerisation reactions
Systematic title based on use descriptor	PROC 1, 2, 3
Name(s) of contributing worker scenarios and corresponding PROCs	<p>PROC 1 - Use in closed process, no likelihood of exposure</p> <p>PROC 2 - Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3 - Use in closed batch process (synthesis or formulation)</p>

6.1.2 Contributing Scenario ES5-CS1: Control industrial worker exposure for PROC 1

Name of contributing scenario	1 - Use in closed process, no likelihood of exposure
Qualitative Risk Assessment	
General	Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	No
Respiratory protection	no

6.1.3 Contributing Scenario ES5-CS2: Control industrial worker exposure for PROC 2

Name of contributing scenario	2 - Use in closed, continuous process with occasional controlled exposure
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	480 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

6.1.4 Contributing Scenario ES5-CS3: Control industrial worker exposure for PROC 3

Name of contributing scenario	3 - Use in closed batch process (synthesis or formulation)
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. In case no suitable local exhaust ventilation is present: Wear a suitable respiratory protection with adequate effectiveness . Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.

Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Effectiveness of LEV	inhalation: 99 % (<i>justification: required effectiveness of LEV</i>)

7. EXPOSURE SCENARIO 6: USE IN COATINGS

7.1 Human Health

7.1.1 Description of ES 6

Free short title	Use in Coatings
Systematic title based on use descriptor	PROC 7, 10
Name(s) of contributing worker scenarios and corresponding PROCs	PROC 7 - Industrial spraying PROC 10 - Roller application or brushing

7.1.2 Contributing Scenario ES6-CS1: Control industrial worker exposure for PROC 7

Name of contributing scenario	7 - Industrial spraying
Qualitative Risk Assessment	
General	Provide a good standard of general or controlled ventilation (5 to 10 air changes per hour) Ensure containment of the emission source and provide extract ventilation to points where emission occur Regular inspection and maintenance of equipment and machines. Clean equipment and the work area every day. Ensure that the task is carried out only downward. Ensure that the worker is in a separated (control) room with independent air supply Ensure that the task is being carried out outside the breathing zone of a worker (distance head-product greater than 1m). Supervision in place to check that the RMMs in place are being used correctly and OCs followed. Avoid/prevent any exposure and emissions In case of potential exposure: Wear suitable respiratory protection.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	30 %, concentration has been considered linearly (<i>justification: Maximal concentration to be used.</i>)
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	1,500 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no

Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	98 %, burst-time: >4 hours (default) (<i>justification: Wear chemically resistant gloves in combination with intensive management supervision control.</i>)
Respiratory protection	no
Use of external/measured value inhalation	Inhalative exposure has been assessed quantitatively using Stoffenmanager 5.0. Other given operational conditions affecting workers exposure: Room size at least 100 m ³ ; effectiveness of LEV: 90%

7.1.3 Contributing Scenario ES6-CS2: Control industrial worker exposure for PROC 10

Name of contributing scenario	10 - Roller application or brushing
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	30 %, concentration has been considered linearly (<i>justification: Maximal concentration to be used.</i>)
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	960 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	good (30%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	98 %, burst-time: >4 hours (default) (<i>justification: Wear chemically resistant gloves in combination with intensive management supervision control.</i>)
Respiratory protection	no
LEV with high effectiveness	inhalation: 99.5 % (<i>justification: Wear chemically resistant gloves in combination with intensive management supervision control.</i>)

8. EXPOSURE SCENARIO 7: USE IN LABORATORIES

8.1 Human Health

8.1.1 Description of ES 7

Free short title	Use in laboratories
Systematic title based on use descriptor	PROC 15
Name(s) of contributing worker scenarios and corresponding PROCs	PROC 15 - Use of laboratory reagents in small scale laboratories

8.1.2 Contributing Scenario ES7-CS1: Control industrial worker exposure for PROC 15

Name of contributing scenario	15 - Use of laboratory reagents in small scale laboratories
Qualitative Risk Assessment	
General	In case of potential exposure: Wear suitable respiratory protection. Avoid/prevent any exposure and emissions Clean equipment and the work area every day. Supervision in place to check that the RMMs in place are being used correctly and OCs followed.
Eyes	Use suitable eye protection.
Product characteristics	
Concentration in substance	100 %
Frequency and duration of use	
Duration of activity	>4 hours (default)
Frequency of use	5 days / week
Human factors not influenced by risk management	
Exposed skin surface	240 cm ²
Other given operational conditions affecting workers exposure	
Location	indoors
Ventilation	enhanced (70%)
Domain	industrial
Technical conditions and measures to control dispersion and exposure	
Local exhaust ventilation	no
Conditions and measures related to personal protection, hygiene and health evaluation	
Protective gloves	Gloves APF 20 95 %
Respiratory protection	no
Fume cupboard	inhalation: 99 % (<i>justification: fume cupboard with high effectiveness</i>)