1. Overview of exposure scenarios

ES number	ES Code	Scenario name
2.1	FI	Filling of containers
2.2	FI	Filling of containers
2.3	FO	Formulation
2.4	FO	Formulation
2.5	MF	Manufacturing of chemical bulk substances
2.6	LAB	Use in laboratory (for sampling, blending, testing)

2. Conditions of use affecting exposure

2.1 Scenario 1: Filling of containers (FI)

This scenario is described by the following combinations of use descriptors. The corresponding contributing scenarios are described in the respective subchapters.

ERC	PROC	PC
ERC1	PROC 8B, PROC 9	

2.1.1 Exposure Scenario
2.1.1.1 Contributing Scenario (1) controlling environmental exposure for ERC1
Filling of containers (FI)

Amounts used	6.000 to per year
Release times per year	100
Environmental factors not influenced by risk management	River flow rate: 18000 m^3/day
Other given operational conditions affecting environmental exposure	release to: air: 5%, water: 6%, soil: 0,01%; fraction used at main source: 100%; fraction tonnage to region: 100%
Conditions and measures related to municipal sewage treatment plant	Municipal sewage treatment plant discharge: 2000000 L/day

2.1.1.2 Contributing Scenario (2) controlling industrial worker exposure for PROC 8B
Filling of containers (FI)

Product characteristics	substance in preparation (inhalation): 5-25%
Duration of activity	180 min/day
Other given operational conditions affecting workers exposure	Work is carried out indoors
Conditions and measures related to personal protection, hygiene and health evaluation	respiratory protection: 90%; protective gloves: 80%, burst-time: > 4 hours (default)

2.1.1.3 Contributing Scenario (3) controlling industrial worker exposure for PROC 9
Filling of containers (FI)

Product characteristics	substance in preparation (inhalation): 5-25%
Duration of activity	> 4 hours (default)
Other given operational conditions affecting workers exposure	Work is carried out indoors; substance in preparation (inhalation): 5-25%

2.2 Scenario 2: Filling of containers (FI)

This scenario is described by the following combinations of use descriptors. The corresponding contributing scenarios are described in the respective subchapters.

ERC	PROC	PC
ERC4	PROC 8B, PROC 9	

2.2.1 Exposure Scenario
2.2.1.1 Contributing Scenario (1) controlling environmental exposure for ERC4
Filling of containers (FI)

Amounts used	6.000 to per year
Release times per year	300
Environmental factors not influenced by risk management	River flow rate: 18000 m^3/day
Other given operational conditions affecting environmental exposure	release to: air: 100%, water: 100%, soil: 5%; fraction used at main source: 100%; fraction tonnage to region: 100%
Conditions and measures related to municipal sewage treatment plant	Municipal sewage treatment plant discharge: 2000000 L/day

2.2.1.2 Contributing Scenario (2) controlling industrial worker exposure for PROC 8B
Filling of containers (FI)

Product characteristics	substance in preparation (inhalation): 5-25%
Duration of activity	180 min/day
Other given operational conditions affecting workers exposure	Work is carried out indoors
Conditions and measures related to personal protection, hygiene and health evaluation	respiratory protection: 90%; protective gloves: 80%, burst-time: > 4 hours (default)

2.2.1.3 Contributing Scenario (3) controlling industrial worker exposure for PROC 9
Filling of containers (FI)

Product characteristics	substance in preparation (inhalation): 5-25%
Duration of activity	> 4 hours (default)
Other given operational conditions affecting workers exposure	Work is carried out indoors; substance in preparation (inhalation): 5-25%

2.3 Scenario 3: Formulation (FO)

This scenario is described by the following combinations of use descriptors. The corresponding contributing scenarios are described in the respective subchapters.

ERC	PROC	PC
ERC2	PROC 8B, PROC 3	

2.3.1 Exposure Scenario
2.3.1.1 Contributing Scenario (1) controlling environmental exposure for ERC2
Formulation (FO)

Amounts used	6.000 to per year
Release times per year	300
Environmental factors not influenced by risk management	River flow rate: 18000 m^3/day
Other given operational conditions affecting environmental exposure	release to: air: 2,5%, water: 2%, soil: 0,01%; fraction used at main source: 100%; fraction tonnage to region: 100%
Conditions and measures related to municipal sewage treatment plant	Municipal sewage treatment plant discharge: 2000000 L/day

2.3.1.2 Contributing Scenario (2) controlling industrial worker exposure for PROC 8B
Formulation (FO)

Duration of activity	> 4 hours (default)
Other given operational conditions affecting workers exposure	Work is carried out indoors
Technical conditions and measures to control dispersion and exposure	local exhaust ventilation

2.3.1.3 Contributing Scenario (3) controlling industrial worker exposure for PROC 3
Formulation (FO)

Duration of activity	1 - 4 hours
Other given operational conditions affecting workers exposure	Work is carried out indoors

2.4 Scenario 4: Formulation (FO)

This scenario is described by the following combinations of use descriptors. The corresponding contributing scenarios are described in the respective subchapters.

ERC	PROC	PC
ERC4	PROC 8B, PROC 3	

2.4.1 Exposure Scenario
2.4.1.1 Contributing Scenario (1) controlling environmental exposure for ERC4
Formulation (FO)

Amounts used	6.000 to per year
Release times per year	300
Environmental factors not influenced by risk management	River flow rate: 18000 m^3/day
Other given operational conditions affecting environmental exposure	release to: air: 100%, water: 100%, soil: 5%; fraction used at main source: 100%; fraction tonnage to region: 100%
Conditions and measures related to municipal sewage treatment plant	Municipal sewage treatment plant discharge: 2000000 L/day

2.4.1.2 Contributing Scenario (2) controlling industrial worker exposure for PROC 8B
Formulation (FO)

Duration of activity	> 4 hours (default)
Other given operational conditions affecting workers exposure	Work is carried out indoors
Technical conditions and measures to control dispersion and exposure	local exhaust ventilation

2.4.1.3 Contributing Scenario (3) controlling industrial worker exposure for PROC 3
Formulation (FO)

Duration of activity	1 - 4 hours
Other given operational conditions affecting workers exposure	Work is carried out indoors

2.5 Scenario 5: Manufacturing of chemical bulk substances (MF)

This scenario is described by the following combinations of use descriptors. The corresponding contributing scenarios are described in the respective subchapters.

ERC	PROC	PC
ERC1	PROC 3	

2.5.1 Exposure Scenario
2.5.1.1 Contributing Scenario (1) controlling environmental exposure for ERC1
Manufacturing of chemical bulk substances (MF)

Amounts used	10.000 to per year
Release times per year	300
Environmental factors not influenced by risk management	River flow rate: 18000 m^3/day
Other given operational conditions affecting environmental exposure	release to: air: 5%, water: 6%, soil: 0,01%; fraction used at main source: 100%; fraction tonnage to region: 100%
Conditions and measures related to municipal sewage treatment plant	Municipal sewage treatment plant discharge: 2000000 L/day

2.5.1.2 Contributing Scenario (2) controlling professional worker exposure for PROC 3
Manufacturing of chemical bulk substances (MF)

Duration of activity	> 4 hours (default)

Other given operational conditions affecting workers exposure	Work is carried out outdoors

2.6 Scenario 6: Use in laboratory (for sampling, blending, testing) (LAB)

This scenario is described by the following combinations of use descriptors. The corresponding contributing scenarios are described in the respective subchapters.

ERC	PROC	PC
ERC1	PROC 15	

2.6.1 Exposure Scenario
2.6.1.1 Contributing Scenario (1) controlling environmental exposure for ERC1
Use in laboratory (for sampling, blending, testing) (LAB)

Amounts used	100 to per year
Release times per year	20
Environmental factors not influenced by risk management	River flow rate: 18000 m^3/day
Other given operational conditions affecting environmental exposure	release to: air: 5%, water: 6%, soil: 0,01%; fraction used at main source: 100%; fraction tonnage to region: 100%
Conditions and measures related to municipal sewage treatment plant	Municipal sewage treatment plant discharge: 2000000 L/day

2.6.1.2 Contributing Scenario (2) controlling professional worker exposure for PROC 15
Use in laboratory (for sampling, blending, testing) (LAB)

Duration of activity	less than 15 mins
Other given operational conditions affecting workers exposure	Work is carried out indoors

3. RISK CHARACTERISATION

Information can be found on the following website: http://www.easytra.com

4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES

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