Trade name: Methanol

Current version : 3.0.1, issued: 28.02.2024 **Replaced version:** 3.0.0, issued: 30.01.2024 **Region:** GB

SECTION 1: Title and scope of exposure scenario (ES)

1.1 Title exposure scenario (ES)

ES5 Use in Cleaning Agents - use in industrial settings

1.2 Scope of exposure scenario (ES)

ES Type	Worker Exposure Scenario for substance/mixture
Life cycle stage	Industrial end use

Product identifier

Trade name	Methanol
Substance name	methanol
REACH registration no.	01-2119433307-44
CAS no.	67-56-1
EC no.	200-659-6

Use descriptors

Sector of use (SU)		
Category	Code	Use description
Main user group	SU3	Industrial uses
Environmental release category (ERC)		
Category	Code	Use description
Environmental release category (ERC)	ERC4	Industrial use of processing aids in processes and products, not becoming part of articles
Process category (PROC)		
Category	Code	Use description
Process category (PROC)	PROC1	Use in closed process, no likelihood of exposure
	PROC2	Use in closed, continuous process with occasional controlled exposure
	PROC3	Use in closed batch process (synthesis or formulation)
	PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
	PROC7	Industrial spraying
	PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
	PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
	PROC10	Roller application or brushing
	PROC13	Treatment of articles by dipping and pouring

SECTION 2: Operational conditions (OC) and risk management measures (RMM) controlling exposure towards environment and men

2.1 Product characteristics

State of aggregation		
liquid		
Reference temperature	25	°C

Dustiness
Not applicable

Vapour pressure		
Value	169.27	hPa
Reference temperature	25	°C

Other information
The efficiency of a risk management measure is a theoretical value. The efficiency describes to which extend (in percent) the calculated exposure can be diminished by applying a certain measure. If the described operational conditions and risk management measures are fulfilled by a downstream user, the efficiency as highlighted in the ES can be applied. A downstream user might check whether the efficiency of the LEV or general ventilation corresponds to his site.
For further instructions related to "Personal protective equipment" please refer to section 8 of the Safety Data Sheet.

2.2 Contributing scenario controlling environmental exposure

Affected environmental release category (ERC)		
Category	Code	Use description
Environmental release category (ERC)	ERC4	Industrial use of processing aids in processes and products, not becoming part of articles

Risk management measures (RMM) controlling environmental exposure

Technical measures and efficiency of the risk managment measures (in exposure calculation model)
No special measures are required.

Organisational measures
No special measures are required.

Measures related to wastewater treatment and efficiency of the risk managment measures (in exposure calculation model)
No special measures are required.

Measures related to waste treatment
For further instructions related to waste management please refer to section 13 of the Safety Data Sheet.

Further measures	
ERC4	No special measures are required.

2.3 Contributing scenario controlling worker exposure

Affected process category (PROC)		
Category	Code	Use description
Process category (PROC)	PROC1	Use in closed process, no likelihood of exposure
	PROC2	Use in closed, continuous process with occasional controlled exposure
	PROC3	Use in closed batch process (synthesis or formulation)
	PROC4	Use in batch and other process (synthesis) where opportunity for exposure arises
	PROC7	Industrial spraying
	PROC8a	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities
	PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
	PROC10	Roller application or brushing
	PROC13	Treatment of articles by dipping and pouring

Operational conditions controlling worker exposure

Concentration of substance						
	PROC1		PROC2		PROC3	
Value	≤ 100	%	≤ 100	%	≤ 100	%
	PROC4		PROC7		PROC8a	
Value	≤ 100	%	≤ 100	%	≤ 100	%
	PROC8b		PROC10		PROC13	
Value	≤ 100	%	≤ 80	%	≤ 100	%

Amounts used			
	PROC1	PROC2	PROC3
	Not relevant	Not relevant	Not relevant
	PROC4	PROC7	PROC8a
	Not relevant	Not relevant	Not relevant
	PROC8b	PROC10	PROC13
	Not relevant	Not relevant	Not relevant

Use conditions							
	PROC1			PROC2		PROC3	
Location of use	Indoor use			Indoor use		Indoor use	
Duration of use	≤ 8	hours/day		≤ 8	hours/day	≤ 8	hours/day
Frequency of use	≤ 240	days/year		≤ 240	days/year	≤ 240	days/year
	PROC4			PROC7		PROC8a	
Location of use	Indoor use			Indoor use		Indoor use	
Duration of use	≤ 8	hours/day		≤ 8	hours/day	≤ 8	hours/day
Frequency of use	≤ 240	days/year		≤ 240	days/year	≤ 240	days/year
	PROC8b			PROC10		PROC13	
Location of use	Indoor use			Indoor use		Indoor use	
Duration of use	≤ 8	hours/day		≤ 8	hours/day	≤ 8	hours/day
Frequency of use	≤ 240	days/year		≤ 240	days/year	≤ 240	days/year

Conditions for indoor use						
	PROC7			PROC10		
Room size	≥ 1000	m³		≥ 1000	m³	

Risk management measures (RMM) controlling worker exposure

Technical measures and efficiency of the risk managment measures (in exposure calculation model)		
PROC1	Measures	No special measures are required.
PROC2	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	90
PROC3	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	90
PROC4	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	90
PROC7	Measures	Provide a good standard of generell ventilation (1 to 3 air changes per hour).
	Efficiency (%)	30
PROC8a	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	90
PROC8b	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	95
PROC10	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	90
PROC13	Measures	Handle only at a place with local exhaust system (or another appropriate exhaust).
	Efficiency (%)	90

Organisational measures	
PROC1	No special measures are required.
PROC2	No special measures are required.
PROC3	No special measures are required.
PROC4	No special measures are required.
PROC7	Ensure that the task is being carried out outside the breathing zone of a worker (distance head-product greater than 1m).
PROC8a	No special measures are required.
PROC8b	No special measures are required.
PROC10	No special measures are required.
PROC13	No special measures are required.

Personal protective equipment and efficiency of the risk managment measures (in exposure calculation model)

Hand protection		
PROC1	Measures	No special measures are required.
PROC2	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC3	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC4	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC7	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC8a	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC8b	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC10	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80
PROC13	Measures	Wear suitable gloves tested to EN374.
	Efficiency (%)	80

SECTION 3: Exposure estimation and reference to sources

3.1 Advice

The Risk Characterization Ratio (RCR) is the quotient of predicted human/environmental exposure and the related DNEL/PNEC. Exposure is calculated based on exposure models as stated below. If RCR ≤ 1 a use is considered as safe under operational conditions and risk management measures as specified in the exposure szenario.

For DNEL/PNEC values please refer to section 8 of the safety data sheet.

3.2 Exposure estimation - Environment

Affected environmental release category (ERC)		
Category	Code	Use description
Environmental release category (ERC)	ERC4	Industrial use of processing aids in processes and products, not becoming part of articles

Used exposure estimation model for calculation of environmental exposure	
Used exposure estimation model	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

3.3 Exposure estimation - Worker

Affected process category (PROC)		
Category	Code	Use description
Process category (PROC)	PROC1	Use in closed process, no likelihood of exposure
	PROC2	Use in closed, continuous process with occasional controlled exposure
	PROC3	Use in closed batch process (synthesis or formulation)
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	PROC8b	Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities
	PROC10	Roller application or brushing
	PROC13	Treatment of articles by dipping and pouring

Used exposure estimation model for calculation of worker exposure	
Used exposure estimation model	EasyTRA Version 3.0 Stoffenmanager v3.5
Link to exposure estimation tool	EASY TRA: http://www.easytra.de Stoffenmanager: https://www.stoffenmanager.nl/
Other information	Exposure assessment is based on Stoffenmanager v3.5 (inhalative exposure) for PROC7.

Risk characterisation ratio (RCR)				
	Exposure estimation	**inhalative**	**dermal**	**total**
PROC1	Long-term systemic	0.000	0.001	0.001
	Short-term systemic	0.000	0.001	0.001
PROC2	Long-term systemic	0.012	0.007	0.019
	Short-term systemic	0.051	0.007	0.058
PROC3	Long-term systemic	0.026	0.003	0.029
	Short-term systemic	0.103	0.003	0.106
PROC4	Long-term systemic	0.051	0.034	0.085
	Short-term systemic	0.205	0.034	0.239
PROC7	Long-term systemic	0.542	0.214	0.756
	Short-term systemic	0.542	0.214	0.756
PROC8a	Long-term systemic	0.128	0.068	0.196
	Short-term systemic	0.257	0.068	0.325
PROC8b	Long-term systemic	0.039	0.068	0.107
	Short-term systemic	0.077	0.068	0.145
PROC10	Long-term systemic	0.103	0.109	0.212
	Short-term systemic	0.205	0.110	0.315
PROC13	Long-term systemic	0.128	0.068	0.196
	Short-term systemic	0.257	0.068	0.325

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

4.1 Recommendations and advice

Recommendations and general advice

- For additional instructions relating to adaptation of conditions of use in view of a scaling, pls. see the “ECHA Guidance for downstream users” http://echa.europa.eu/regulations/reach/downstream-users

If a downstream user uses the substance/preparation differently than stated in the ES (different operational conditions and/or risk management measures), he has the possibility to vary certain parameters of the exposure assessment. With the help of easy calculations he can check whether he still operates under safe circumstances. This process is called Scaling.

Scaling advice

Type of ventilation
If the type of ventilation at the use site of a downstream user (DU) differs from the instructions in the ES, a linear correlation between the RCR (Inhalation) and the type of ventilation exists. Following scaling factors (f) apply: General ventilation (< 3 air changes per hour) =1; good general ventilation (3 to 5 air changes per hour, corresponds to outdoor use) = 0,7; enhanced general ventilation (> 5 air changes per hour) = 0,3.
RCR (DU) = f(DU) * RCR (as stated in ES) / f (type of ventilation stated in ES)
In the same manner a scaling for the efficiency of the local extract ventilation (LEV) can by applied.

Duration of use
If the duration of the use by a worker at a downstream user (DU) site differs from the instructions in the ES, a linear correlation between the RCR (Inhalation) and the duration of use exist. Following scaling factors (f) apply: duration > 4 hours/day = 1; duration: 1-4 hours/day = 0,6; duration: 15 min/day – 1 hour/day = 0,2; duration < 15 min/day = 0,1.
RCR (DU) = f(DU) * RCR (as stated in ES) / f (duration in ES)

Concentration of the substance in the product
If the downstream user (DU) uses the substance in a different concentration than the one stated in the ES, a linear correlation between the RCR (Inhalation)and the RCR (dermal) and the concentration exists. Following scaling factors (f) apply: Concentration >25% =1; concentration >= 5% = 0,6; concentration >= 1% = 0,2; concentration < 1% = 0,1.
RCR (DU) = f(DU) * RCR (as stated in ES) / f (concentration in ES).

4.2 Exposure estimation - Environment

Used exposure estimation model for calculation of environmental exposure	
Used exposure estimation model	As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.

4.3 Exposure estimation - Worker

Used exposure estimation model for calculation of worker exposure	
Used exposure estimation model	EasyTRA Version 3.0 Stoffenmanager v3.5
Link to exposure estimation tool	EASY TRA: http://www.easytra.de Stoffenmanager: https://www.stoffenmanager.nl/
Other information	Exposure assessment is based on Stoffenmanager v3.5 (inhalative exposure) for PROC7.