We create chemistry

Safety data sheet

BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.
Date / Revised: 11.01.2023 Version: 3.0
Date previous version: 17.08.2021 Previous version: 2.0
Date / First version: 28.03.2017
Product: **K-Methylate sol. 32 %**

(ID no. 30036706/SDS_GEN_IE/EN)
Date of print 16.10.2025

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

K-Methylate sol. 32 %

UFI: MFJU-MFTK-8009-0CKV

1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Chemical
Recommended use: process chemical, Intermediate, catalyst

For the detailed identified uses of the product see appendix of the safety data sheet.

1.3. Details of the supplier of the safety data sheet

Company:
BASF SE
67056 Ludwigshafen
GERMANY

Contact address:
BASF Ireland DAC
Asgard House, 19-20 City Quay
Dublin, D02 K744
Ireland

Telephone: +353 21 451-7100
E-mail address: product-safety-uk-and-ireland@basf.com

1.4. Emergency telephone number

For products classified as hazardous in accordance with CLP:
National Poisons Information Centre, Beaumont Hospital, Dublin 9
Emergency medical information: 8am-10pm (seven days)
Tel.: 01 8092566
International emergency number:
Telephone: +49 180 2273-112

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

For the classification of the mixture the following methods have been applied: extrapolation on the concentration levels of the hazardous substances, on basis of test results and after evaluation of experts. The methodologies used are mentioned at the respective test results.

According to Regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3	H226 Flammable liquid and vapour.
Acute Tox. 3 (Inhalation - vapour)	H331 Toxic if inhaled.
Acute Tox. 3 (oral)	H301 Toxic if swallowed.
Acute Tox. 3 (dermal)	H311 Toxic in contact with skin.
Skin Corr./Irrit. 1B	H314 Causes severe skin burns and eye damage.
Eye Dam./Irrit. 1	H318 Causes serious eye damage.
STOT SE 1	H370 Causes damage to organs (Central nervous system, Optic nerve).

For the classifications not written out in full in this section the full text can be found in section 16.

2.2. Label elements

According to Regulation (EC) No 1272/2008 [CLP]

Pictogram:

Signal Word:

Danger

Hazard Statement:

H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H370	Causes damage to organs (central nervous system, optic nerve).

Precautionary Statements (Prevention):

P280	Wear protective gloves, protective clothing and eye protection or face protection.
P271	Use only outdoors or in a well-ventilated area.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/gas/mist/vapours.
P243	Take action to prevent static discharges.
P241	Use explosion-proof electrical, ventilating and lighting equipment.
P264	Wash contaminated body parts thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P234	Keep only in original packaging.

P242	Use only non-sparking tools.
P240	Ground and bond container and receiving equipment.

Precautionary Statements (Response):

P310	Immediately call a POISON CENTER or physician.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303 + P361 + P353	IF ON SKIN (or hair): Remove or Take off immediately all contaminated clothing. Rinse skin with water or shower.
P301	IF SWALLOWED:
P330	Rinse mouth
P331	Do NOT induce vomiting.
P390	Absorb spillage to prevent material damage.
P370 + P378	In case of fire: Use foam, dry powder or dry sand for extinction.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or physician.

Precautionary Statements (Storage):

P403 + P235	Store in a well-ventilated place. Keep cool.
P233	Keep container tightly closed.
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

Precautionary Statements (Disposal):

P501	Dispose of contents and container to hazardous or special waste collection point.

Hazard determining component(s) for labelling: potassium methanolate, methanol

2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

No specific dangers known, if the regulations/notes for storage and handling are considered.
The product does not contain a substance above legal limits fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.
Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Preparation based on:potassium methanolate, methanol

Regulatory relevant ingredients

methanol

Content (W/W): 68 % CAS Number: 67-56-1 EC-Number: 200-659-6 REACH registration number: 01-2119433307-44 INDEX-Number: 603-001-00-X	Flam. Liq. 2 Acute Tox. 3 (Inhalation - vapour) Acute Tox. 3 (oral) Acute Tox. 3 (dermal) STOT SE (Central nervous system, Optic nerve) 1 H225, H301 + H311 + H331, H370 Specific concentration limit: STOT SE 2: 3 - < 10 % STOT SE 1: >= 10 %

potassium methanolate

Content (W/W): 32 % CAS Number: 865-33-8 EC-Number: 212-736-1 REACH registration number: 01-2119519243-47 INDEX-Number: 603-040-00-2	Flam. Sol. 1 Self-heat. 1 Met. Corr. 1 Acute Tox. 4 (oral) Eye Dam./Irrit. 1 Skin Corr./Irrit. 1B H228, H290, H251, H302, H314 EUH014 Differing classification according to current knowledge and the criteria given in Annex I of Regulation (EC) No. 1272/2008 Flam. Sol. 1 Self-heat. 1 Met. Corr. 1 Acute Tox. 4 (oral) Skin Corr./Irrit. 1A Eye Dam./Irrit. 1 EUH014

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

SECTION 4: First-Aid Measures

4.1. Description of first aid measures

First aid personnel should pay attention to their own safety. Immediately remove contaminated clothing. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position).

If inhaled:
Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:
Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

On contact with eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:
Immediately rinse mouth and then drink 200 - 300 ml water, do not induce vomiting, seek medical attention. Administer 50 ml of pure ethanol in a drinkable concentration. Seek medical attention.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11., skin corrosion, irritates the eyes and respiratory tract, blindness, (Further) symptoms and / or effects are not known so far

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: Symptomatic treatment (decontamination, vital functions).

SECTION 5: Fire-Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:
dry powder, Dry sand, alcohol-resistant foam

Unsuitable extinguishing media for safety reasons:
water, carbon dioxide

5.2. Special hazards arising from the substance or mixture

Advice: Risk of exothermic reaction.

5.3. Advice for fire-fighters

Special protective equipment:
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:
Vapours are heavier than air and may accumulate in low areas and travel a considerable distance up to the source of ignition. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Sealed containers should be protected against heat as this results in pressure build-up.

SECTION 6: Accidental Release Measures

Release of substance/product can cause fire or explosion.

6.1. Personal precautions, protective equipment and emergency procedures

Sources of ignition should be kept well clear. Use personal protective clothing. Avoid inhalation. Avoid contact with skin and eyes.

6.2. Environmental precautions

Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

6.3. Methods and material for containment and cleaning up

For large amounts: Pump off product.
For residues: Pick up with suitable absorbent material (e.g. sand, sawdust, general-purpose binder, kieselguhr). Dispose of absorbed material in accordance with regulations.

6.4. Reference to other sections

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Protect against moisture. Protect against heat.

Protection against fire and explosion:
Avoid all sources of ignition: heat, sparks, open flame. Take precautionary measures against static discharges. Use antistatic tools. Render equipment and apparatus inert (nitrogen, inert gases) and ground before putting into operation. Fire extinguishers should be kept handy.

7.2. Conditions for safe storage, including any incompatibilities

Segregate from acids and acid forming substances. Keep away from water.

Suitable materials for containers: Carbon steel (Iron), Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HDPE), Low density polyethylene (LDPE), enamelled, glass, Stainless steel 1.4541, Stainless steel 1.4571
Unsuitable materials for containers: Paper/Fibreboard
Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place. Keep under dry nitrogen. Protect against moisture. Protect against heat. Keep away from sources of ignition - No smoking.

Protect from temperatures below:-20 °C

The product crystallizes below the limit temperature.

7.3. Specific end use(s)

See exposure scenario(s) in the attachment to this safety data sheet.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

67-56-1: methanol

Skin Designation (OEL (EU))
The substance can be absorbed through the skin.
TWA value 260 mg/m3 ; 200 ppm (OEL (EU))
indicative
TWA value 260 mg/m3 ; 200 ppm (OEL (IE))
Indicative OELV
Skin Designation (OEL (IE))
The substance can be absorbed through the skin.

Components with PNEC

67-56-1: methanol

freshwater:
No hazard identified.
marine water:
No hazard identified.
intermittent release:
No hazard identified.
STP:
No hazard identified.
sediment (freshwater):
No hazard identified.
sediment (marine water):
No hazard identified.
soil:
No hazard identified.

865-33-8: potassium methanolate

freshwater: 154 mg/l
marine water: 15.4 mg/l
intermittent release: 1540 mg/l
STP: 100 mg/l
sediment (freshwater): 570.4 mg/kg
soil: 23.5 mg/kg
oral (secondary poisoning):
No PNEC oral derived, as accumulation in organisms is not to be expected.

Components with DNEL

865-33-8: potassium methanolate

No DNELs have been derived.

67-56-1: methanol

worker: Long-term exposure- systemic effects, dermal: 20 mg/kg
worker: Short-term exposure - systemic effects, dermal: 20 mg/kg
worker: Long-term exposure- systemic effects, Inhalation: 130 mg/m3
worker: Short-term exposure - systemic effects, Inhalation: 130 mg/m3
worker: Long-term exposure - local effects, Inhalation: 130 mg/m3
worker: Short-term exposure - local effects, Inhalation: 130 mg/m3
consumer: Long-term exposure- systemic effects, oral: 4 mg/kg
consumer: Short-term exposure - systemic effects, oral: 4 mg/kg
consumer: Long-term exposure- systemic effects, dermal: 4 mg/kg
consumer: Short-term exposure - systemic effects, dermal: 4 mg/kg
consumer: Long-term exposure- systemic effects, Inhalation: 26 mg/m3
consumer: Short-term exposure - systemic effects, Inhalation: 26 mg/m3
consumer: Long-term exposure - local effects, Inhalation: 26 mg/m3
consumer: Short-term exposure - local effects, Inhalation: 26 mg/m3

8.2. Exposure controls

Personal protective equipment

Respiratory protection:
Wear respiratory protection if ventilation is inadequate. Suitable respiratory protection for lower concentrations or short-term effect: Gas filter for gases/vapours of organic compounds (boiling point <65 °C, f.e. EN 14387 Type AX)

Hand protection:
Chemical resistant protective gloves (EN ISO 374-1)
Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1):
butyl rubber (butyl) - 0.7 mm coating thickness
fluoroelastomer (FKM) - 0.7 mm coating thickness

Suitable materials for short-term contact (recommended: At least protective index 2, corresponding > 30 minutes of permeation time according to EN ISO 374-1)
nitrile rubber (NBR) - 0.4 mm coating thickness
chloroprene rubber (CR) - 0.5 mm coating thickness
polyvinylchloride (PVC) - 0.7 mm coating thickness

Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:
Safety glasses with side-shields (frame goggles) (f.e. EN 166) and face shield

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Avoid contact with the skin, eyes and clothing. Do not breathe vapour/spray. Handle in accordance with good industrial hygiene and safety practice. Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	liquid
Form:	liquid
Colour:	colourless to yellowish
Odour:	perceptible, of methanol
Odour threshold:	Not determined since toxic by inhalation.
solidification temperature:	-24.1 °C
Boiling point:	approx. 92 °C (1,013 mbar)
Lower explosion limit:	For liquids not relevant for classification and labelling.
Information on: methanol	
Lower explosion limit:	*For liquids not relevant for classification and labelling., The lower explosion point may be 5 - 15 °C below the flash point.*

Upper explosion limit:	For liquids not relevant for classification and labelling.
Information on: methanol	
Upper explosion limit:	*For liquids not relevant for classification and labelling.*

Flash point:	31 °C	(DIN 51755)
Auto-ignition temperature:	455 °C	(DIN 51794)
Information on: methanol		
Auto-ignition temperature:	*455 °C*	

Thermal decomposition: It is not a self-decompositionable substance.

pH value:	approx. 11 The products resulting from hydrolysis react strongly alkaline.	(ISO 1148)
Viscosity, kinematic:	No data available.	
Viscosity, dynamic:	18 mPa.s (20 °C)	
Solubility in water:	hydrolyzes (20 °C)	

Information on: methanol

Partitioning coefficient n-octanol/water (log Kow): -0.77 (measured)
(20 °C)
Literature data.

Vapour pressure:	approx. 36 mbar (20 °C)	(measured)
	approx. 180 mbar (50 °C)	(measured)
	approx. 205 mbar (55 °C)	(measured)
Relative density:	No data available.	
Density:	0.98 g/cm3 (20 °C)	(ISO 2811-3)
	0.975 g/cm3 (50 °C)	(ISO 2811-3)
	0.9687 g/cm3 (55 °C)	

Particle characteristics

Particle size distribution: The substance / product is marketed or used in a non solid or granular form. -

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: not explosive

Oxidizing properties

Fire promoting properties: not fire-propagating

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating.

Corrosion to metals

Corrosive effect on: - Aluminium

Other safety characteristics

Hygroscopy: hygroscopic

Evaporation rate:

Value can be approximated from Henry's Law Constant or vapor pressure.

SECTION 10: Stability and Reactivity

10.1. Reactivity

Strong exothermic reaction with acids., Vapours may form explosive mixture with air., No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effect on: Aluminium

10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

10.3. Possibility of hazardous reactions

Exothermic reaction. Reacts with water and acids.

10.4. Conditions to avoid

Avoid all sources of ignition: heat, sparks, open flame. Avoid contact with air. Avoid moisture.

10.5. Incompatible materials

Substances to avoid:
Carbon dioxide, water, acids, substances with an acid reaction, light metals

10.6. Hazardous decomposition products

Hazardous decomposition products:
potassium hydroxide, methanol

SECTION 11: Toxicological Information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Assessment of acute toxicity:
The toxicity of the product is based on its corrosivity.

Experimental/calculated data:
(oral):The product has not been tested. The statement has been derived from the properties of the individual components.

ATE (oral): 145 mg/kg

Information on: methanol
Assessment of acute toxicity:
Of high toxicity after single ingestion. Of high toxicity after short-term inhalation. Of high toxicity after short-term skin contact.

Information on: methanol
Experimental/calculated data:
LC50 rat (by inhalation): 128 mg/l 4 h (BASF-Test)
The vapour was tested.

Information on: methanol
Experimental/calculated data:
LD50 rabbit (dermal): 17100 mg/kg (other)

Irritation

Assessment of irritating effects:
Causes severe burns. Risk of serious damage to eyes.

The break through time determined in the in-vitro membrane barrier test indicates that the test substance is expected to cause skin necrosis in vivo within 14 days after a 1-hour exposure.

Experimental/calculated data:
Skin corrosion/irritation
: Corrosive. (OECD Guideline 435)

Respiratory/Skin sensitization

Assessment of sensitization:
As the substance is corrosive, conducting sensitization studies is not feasible.

Germ cell mutagenicity

Information on: potassium methanolate
Assessment of mutagenicity:
The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Information on: methanol
Assessment of mutagenicity:

In the majority of studies performed with microorganisms and in mammalian cell culture, a mutagenic effect was not found. A mutagenic effect was also not observed in in vivo tests.

Carcinogenicity

Information on: methanol
Assessment of carcinogenicity:
In long-term studies in rats and mice in which the substance was given by inhalation, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given in the drinking water in high concentrations, a carcinogenic effect was observed. These effects are not relevant to humans at occupational levels of exposure.

Reproductive toxicity

Information on: methanol
Assessment of reproduction toxicity:
The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Information on: methanol
Assessment of teratogenicity:
The results of animal studies gave indication of a developmental toxic/teratogenic effects with high doses.

Specific target organ toxicity (single exposure)

No data available.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Information on: methanol
Assessment of repeated dose toxicity:
The substance may cause blindness after repeated ingestion. The substance may cause blindness after repeated inhalation.

Aspiration hazard

Toxic if swallowed.

Interactive effects

No data available.

11.2. Information on other hazards

Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological Information

12.1. Toxicity

Assessment of aquatic toxicity:
The product has not been tested. The statement has been derived from the properties of the hydrolysis products.

Information on:potassium hydroxide
Assessment of aquatic toxicity:
At the present state of knowledge, no negative ecological effects are expected.
The product gives rise to pH shifts. Study scientifically not justified.

Information on:methanol
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Information on:methanol
Toxicity to fish:
LC50 (96 h) 15,400 mg/l, Lepomis macrochirus (other, Flow through.)

Information on:methanol
Aquatic invertebrates:
EC50 (48 h) 18,260 mg/l, Daphnia magna (OECD Guideline 202, part 1, semistatic)

Information on:methanol
Aquatic plants:
EC50 (96 h) approx. 22,000 mg/l (growth rate), Selenastrum capricornutum (OECD Guideline 201, static)

Information on:methanol
Microorganisms/Effect on activated sludge:
EC50 (3 h) > 1,000 mg/l, (OECD Guideline 209, aquatic)

EC50 (24 h) 880 mg/l, Nitrosomonas sp. (Inhibition of nitrification, aquatic)

12.2. Persistence and degradability

Assessment biodegradation and elimination (H2O):
The product is unstable in water. The elimination data also refer to products of hydrolysis. The organic component of the product is biodegradable.

Information on:potassium hydroxide
Assessment biodegradation and elimination (H2O):
Not applicable for inorganic substances.

Information on:methanol
Assessment biodegradation and elimination (H2O):
Readily biodegradable (according to OECD criteria).

Information on:methanol
Elimination information:
95 % BOD of the ThOD (20 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, activated sludge, domestic, non-adapted) Readily biodegradable (according to OECD criteria).

12.3. Bioaccumulative potential

Information on:methanol
Assessment bioaccumulation potential:
Significant accumulation in organisms is not to be expected.

Information on:potassium hydroxide
Assessment bioaccumulation potential:
Accumulation in organisms is not to be expected.

12.4. Mobility in soil

Assessment transport between environmental compartments:
Adsorption in soil: Adsorption to solid soil phase is not expected.

12.5. Results of PBT and vPvB assessment

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

12.6. Endocrine disrupting properties

Product does not contain a substance above legal limits included in the list established in accordance with Article 59(1) of Regulation (EC) No 1907/2006 for having endocrine disrupting properties or is identified to have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

12.8. Additional information

Other ecotoxicological advice:
Due to the pH-value of the product, neutralization is generally required before discharging sewage into treatment plants. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. Do not release untreated into natural waters.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Obtain the consent of pollution control authorities before discharging to wastewater treatment plants.

Contaminated packaging:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

SECTION 14: Transport Information

Land transport

ADR

UN number or ID number:	UN2920
UN proper shipping name:	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (POTASSIUM METHANOLATE, METHANOL) SOLUTION
Transport hazard class(es):	8, 3
Packing group:	II
Environmental hazards:	no
Special precautions for user:	Tunnel code: D/E

RID

UN number or ID number:	UN2920
UN proper shipping name:	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (POTASSIUM METHANOLATE, METHANOL) SOLUTION
Transport hazard class(es):	8, 3
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Inland waterway transport

ADN

UN number or ID number:	UN2920
UN proper shipping name:	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (POTASSIUM METHANOLATE, METHANOL) SOLUTION
Transport hazard class(es):	8, 3
Packing group:	II
Environmental hazards:	no
Special precautions for user:	None known

Transport in inland waterway vessel
Not evaluated

Sea transport

IMDG

UN number or ID number:	UN 2920
UN proper shipping name:	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (POTASSIUM METHANOLATE, METHANOL) SOLUTION

Transport hazard class(es):	8, 3
Packing group:	II
Environmental hazards:	no Marine pollutant: NO
Special precautions for user:	EmS: F-E; S-C

Air transport

IATA/ICAO

UN number or ID number:	UN 2920
UN proper shipping name:	CORROSIVE LIQUID, FLAMMABLE, N.O.S. (POTASSIUM METHANOLATE, METHANOL) SOLUTION
Transport hazard class(es):	8, 3
Packing group:	II
Environmental hazards:	No Mark as dangerous for the environment is needed
Special precautions for user:	None known

14.1. UN number or ID number
See corresponding entries for “UN number or ID number” for the respective regulations in the tables above.

14.2. UN proper shipping name
See corresponding entries for “UN proper shipping name” for the respective regulations in the tables above.

14.3. Transport hazard class(es)
See corresponding entries for “Transport hazard class(es)” for the respective regulations in the tables above.

14.4. Packing group
See corresponding entries for “Packing group” for the respective regulations in the tables above.

14.5. Environmental hazards
See corresponding entries for “Environmental hazards” for the respective regulations in the tables above.

14.6. Special precautions for user
See corresponding entries for “Special precautions for user” for the respective regulations in the tables above.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

SECTION 15: Regulatory Information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3, 40, 69, 75

Directive 2012/18/EU - Control of Major Accident Hazards involving dangerous substances (EU):
List entry in regulation: H2
List entry in regulation: H3
List entry in regulation: P5c

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

15.2. Chemical Safety Assessment

Chemical Safety Assessment performed

SECTION 16: Other Information

Flam. Liq.	Flammable liquids
Acute Tox.	Acute toxicity
Skin Corr./Irrit.	Skin corrosion/irritation
Eye Dam./Irrit.	Serious eye damage/eye irritation
STOT SE	Specific target organ toxicity — single exposure
Flam. Sol.	Flammable solids
Self-heat.	Self-heating substances and mixtures
Met. Corr.	Corrosive to metals
H226	Flammable liquid and vapour.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H311	Toxic in contact with skin.
H331	Toxic if inhaled.
H301	Toxic if swallowed.
H370	Causes damage to organs (central nervous system, optic nerve).
H225	Highly flammable liquid and vapour.
H301 + H311 + H331	Toxic if swallowed, in contact with skin or if inhaled
H370	Causes damage to organs (Central nervous system, Optic nerve).
H228	Flammable solid.
H251	Self-heating: may catch fire.
H302	Harmful if swallowed.
EUH014	Reacts violently with water.

Abbreviations

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN = The European Agreement concerning the International Carriage of Dangerous Goods by Inland waterways. ATE = Acute Toxicity Estimates. CAO = Cargo Aircraft Only. CAS = Chemical Abstract Service. CLP = Classification, Labelling and Packaging of substances and mixtures. DIN = German national organization for standardization. DNEL = Derived No Effect Level. EC50 = Effective concentration median for 50% of the population. EC = European Community. EN = European Standards. IARC = International Agency for Research on Cancer. IATA = International Air Transport Association. IBC-Code = Intermediate Bulk Container code. IMDG = International Maritime Dangerous Goods Code. ISO = International Organization for Standardization. STEL = Short-Term Exposure Limit. LC50 = Lethal concentration median for 50% of the population. LD50 = Lethal dose median for 50% of the population. TLV = Threshold Limit Value. MARPOL = The International Convention for the Prevention of Pollution from Ships. NEN = Dutch Norm. NOEC = No Observed Effect Concentration. OEL = Occupational Exposure Limit. OECD = Organization for Economic Cooperation and Development. PBT = Persistent, Bioaccumulative and Toxic. PNEC = Predicted No Effect Level. PPM = Parts per million. RID = The European Agreement concerning the International Carriage of Dangerous Goods by Rail. TWA = Time Weight Average. UN-number = UN number at transport. vPvB = very Persistent and very Bioaccumulative.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Annex: Exposure Scenarios

Index

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1. Short title of exposure scenario

Manufacture of substance
SU3; SU8, SU9; ERC1; PROC1, PROC8b, PROC9

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC1: Manufacture of the substance As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or

	mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week

Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0.0134 mg/m³
Risk Characterization Ratio (RCR)	0.000103
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	0.0534 mg/m³
Risk Characterization Ratio (RCR)	0.000411
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol

	Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day

Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %

Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

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2. Short title of exposure scenario

Use in/as Formulation, Formulation & (re)packing of substances and mixtures
SU3; SU10; ERC2; PROC1, PROC8b, PROC9

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC2: Formulation into mixture As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing).

	Use domain: industrial
Operational conditions	
Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	

Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0.0134 mg/m³
Risk Characterization Ratio (RCR)	0.000103
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	0.0534 mg/m³
Risk Characterization Ratio (RCR)	0.000411
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid

Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic

Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa

Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

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3. Short title of exposure scenario

Use in chemical synthesis
SU3; SU8, SU9; ERC6a; PROC1, PROC8b, PROC9; PC19

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC6a: Use of intermediate As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	

Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.0343 mg/kg bw/day

Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0.0134 mg/m³
Risk Characterization Ratio (RCR)	0.000103
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	0.0534 mg/m³
Risk Characterization Ratio (RCR)	0.000411
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week

Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	

For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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4. Short title of exposure scenario

Use as laboratory reagent/agent, Use in laboratories
SU22; SU24; ERC8a; PROC15; PC21

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC8a: Widespread use of non-reactive processing aid (no inclusion into or onto article, indoor) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	

Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 80 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker

	Worker - dermal, long-term - systemic
Exposure estimate	0.0686 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.003429
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	13.3508 mg/m³
Risk Characterization Ratio (RCR)	0.102698
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC15: Use a laboratory reagent. Use domain: professional
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 80 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	0.0686 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.003429
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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5. Short title of exposure scenario

Production of pharmaceutical products
SU3; SU0-1, SU3; ERC4; PROC2, PROC8b, PROC9; PC29

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	

Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.2743 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.013714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	3.3377 mg/m³
Risk Characterization Ratio (RCR)	0.025675
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC2: Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions Use domain: industrial
Operational conditions	
Concentration of the substance	methanol

	Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.2743 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.013714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	13.3508 mg/m³
Risk Characterization Ratio (RCR)	0.102698
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143

Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %

Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker

	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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6. Short title of exposure scenario

Use as a Process chemical
SU3; SU8, SU9; ERC4; PROC1, PROC8b, PROC9; PC20

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	

Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0.0134 mg/m³
Risk Characterization Ratio (RCR)	0.000103
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	0.0534 mg/m³
Risk Characterization Ratio (RCR)	0.000411
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %

Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial

Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified

	version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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7. Short title of exposure scenario

Use as a Process chemical, Use in food products
SU3; SU4; ERC4; PROC1, PROC8b, PROC9; PC20

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %

Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker

	Worker - inhalation, long-term - systemic
Exposure estimate	0.0134 mg/m³
Risk Characterization Ratio (RCR)	0.000103
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	0.0534 mg/m³
Risk Characterization Ratio (RCR)	0.000411
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor

	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	

Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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8. Short title of exposure scenario

Use as a Process chemical, Manufacturing of fuels
SU3; SU8; ERC4; PROC1, PROC8b, PROC9; PC13

Control of exposure and risk management measures

Contributing exposure scenario	
Use descriptors covered	ERC4: Use of non-reactive processing aid at industrial site (no inclusion into or onto article) As no environmental hazard was identified no environmental-related exposure assessment and risk characterization was performed.
Waste-Related Measures	
Prescribed disposal method	waste combuster

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing).

	Use domain: industrial
Operational conditions	
Concentration of the substance	potassium methanolate Content: >= 0 % - < 35 %
Physical state	Solid in solution
Duration and Frequency of activity	480 min 240 days per year
Risk Management Measures	
Supervision in place to check that the RMMs in place are being used correctly and OCs followed.	
Provide extract ventilation to points where emissions occur (LEV). Handle substance within closed system.	
Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. Wear a full face respirator conforming to EN 136 with type A filter or better. Wear suitable face shield Wear suitable gloves tested to EN ISO 374-1.	
Risk Management Measures are based on qualitative risk characterisation.	
Exposure estimate and reference to its source	
Assessment method	Qualitative assessment
	Worker - all relevant routes
Additional good practice advice	
Personal measures are recommended in case of potential exposure only.	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	

Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	0.0134 mg/m³
Risk Characterization Ratio (RCR)	0.000103
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC1: Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions. Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, short-term - systemic
Exposure estimate	0.0343 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.001714
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	0.0534 mg/m³
Risk Characterization Ratio (RCR)	0.000411
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid

Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	10.0131 mg/m³
Risk Characterization Ratio (RCR)	0.077024
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC8b: Transfer of substance or mixture (charging and discharging) at dedicated facilities Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 95 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	2.7429 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.137143
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic

Exposure estimate	20.0262 mg/m³
Risk Characterization Ratio (RCR)	0.154048
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa
Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - dermal, long-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, long-term - systemic
Exposure estimate	26.7016 mg/m³
Risk Characterization Ratio (RCR)	0.205397
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra	

Contributing exposure scenario	
Use descriptors covered	PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing). Use domain: industrial
Operational conditions	
Concentration of the substance	methanol Content: >= 0 % - <= 100 %
Physical state	liquid
Vapour pressure of the substance during use	16927 Pa

Duration and Frequency of activity	480 min 5 days per week
Indoor/Outdoor	Indoor
	Assumes activities are at ambient temperature.
Risk Management Measures	
Local exhaust ventilation	Effectiveness: 90 %
Use suitable chemically resistant gloves.	Effectiveness: 80 %
Exposure estimate and reference to its source	
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, worker, modified version
	Worker - dermal, short-term - systemic
Exposure estimate	1.3714 mg/kg bw/day
Risk Characterization Ratio (RCR)	0.068571
Assessment method	EASY TRA v4.2, ECETOC TRA v3.0, Worker
	Worker - inhalation, short-term - systemic
Exposure estimate	53.4032 mg/m³
Risk Characterization Ratio (RCR)	0.410794
Guidance to Downstream Users	
For scaling see: http://www.ecetoc.org/tra Please note that a modified version has been used (see exposure estimates)	

Contributing exposure scenario	
Use descriptors covered	All relevant product categories As no toxicological hazard was identified no human related (worker/consumer) exposure assessment and risk characterization was performed.

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