

SAFETY DATA SHEET**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product name	Methanol
Proper shipping name	Methyl alcohol
SDS no.	0000001094
EC number	200-659-6
CAS number	67-56-1
REACH Registration number	01-2119433307-44-0050
Product type	Liquid.

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

Identified uses	
<input checked="" type="checkbox"/> Manufacture of substance Distribution of substance Formulation and (re)packing of substances and mixtures Use as wastewater treatment chemical - Industrial Use in cleaning agents - Industrial Use in cleaning agents - Professional Use in oil and gas field drilling and production operations Use in fuel - Industrial Use in fuel - Professional Use as laboratory reagent - Industrial Use as laboratory reagent - Professional Cleaning agents and De-icers (Liquid products) - Consumer Cleaning agents and De-icers (spray) - Consumer Use in fuel, Fuel additive. (Outdoor use) - Consumer	
Uses advised against	Reason
<input checked="" type="checkbox"/> Use in fuel, Domestic/hobby use e.g. model engines, fuel cells, fondue set (Indoor use) - Consumer	Safe use cannot be demonstrated.

Use of the substance/mixture Industrial applications

1.3 Details of the supplier of the safety data sheet

Supplier	BP Chemicals Ltd Saltend Hull HU12 8DS United Kingdom Tel: +44 (0) 1482 896251
E-mail address	MSDSadvice@bp.com

1.4 Emergency telephone number

EMERGENCY TELEPHONE NUMBER Carechem: +44 (0) 1235 239 670 (24/7)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture**

Product definition Mono-constituent substance
Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Product name Methanol	Product code 0000001094	Page: 1/45
Version 6	Date of issue 27 December 2019	Format United Kingdom (UK) (United Kingdom)
		Language ENGLISH

SECTION 2: Hazards identification

Flam. Liq. 2, H225
 Acute Tox. 3, H301
 Acute Tox. 3, H311
 Acute Tox. 3, H331
 STOT SE 1, H370 (central nervous system (CNS), optic nerve)
 See Section 16 for the full text of the H statements declared above.
 See sections 11 and 12 for more detailed information on health effects and symptoms and environmental hazards.

2.2 Label elements**Hazard pictograms****Signal word**

Danger

Hazard statements

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 (CNS), optic nerve)

Precautionary statements**Prevention**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Response

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or physician.
 P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements

Not applicable.

EU Regulation (EC) No. 1907/2006 (REACH)
**Annex XVII - Restrictions
on the manufacture,
placing on the market
and use of certain
dangerous substances,
mixtures and articles**

Not applicable.

Special packaging requirements
**Containers to be fitted
with child-resistant
fastenings**

Not applicable.

Tactile warning of danger

Not applicable.

2.3 Other hazards
**Product meets the criteria
for PBT or vPvB according
to Regulation (EC) No.
1907/2006, Annex XIII**

PBT	P	B	T	vPvB	vP	vB
No	N/A	No	No	No	N/A	No

**Other hazards which do
not result in classification**

Can be fatal or cause blindness if swallowed, inhaled, or on prolonged or repeated skin contact.
 Vapour may be irritating to eyes and respiratory system.
 Burns with an almost invisible flame.

SECTION 3: Composition/information on ingredients**3.1 Substances****Product definition**

Mono-constituent substance

Aliphatic alcohol.

**Product/ingredient
name**
Identifiers**%**
**Regulation (EC) No.
1272/2008 [CLP]**
Type**Product name** Methanol**Product code** 0000001094**Page:** 2/45**Version** 6**Date of issue** 27 December 2019
Format United
Kingdom
(UK)
(United Kingdom)
Language ENGLISH

SECTION 3: Composition/information on ingredients

Methanol	EC: 200-659-6 CAS: 67-56-1 Index: 603-001-00-X	100	Flam. Liq. 2, H225 Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 3, H331 STOT SE 1, H370 (central nervous system (CNS), optic nerve)	[A]
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See Section 16 for the full text of the H statements declared above.

Type

[A] Constituent

[B] Impurity

[C] Stabilising additive

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures**4.1 Description of first aid measures**

Eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.
Skin contact	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Drench contaminated clothing with water before removing. This is necessary to avoid the risk of sparks from static electricity that could ignite contaminated clothing. Contaminated clothing is a fire hazard. Contaminated leather, particularly footwear, must be discarded. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.
Inhalation	If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention immediately.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Potential acute health effects

Inhalation	Toxic if inhaled.
Ingestion	Toxic if swallowed.
Skin contact	Toxic in contact with skin.
Eye contact	No known significant effects or critical hazards.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Inhalation	Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs. Vapour, mist or fume may irritate the nose, mouth and respiratory tract.
Ingestion	May be fatal or cause blindness if swallowed. If swallowed, may irritate the mouth, throat and digestive system. If swallowed, may cause abdominal pain, stomach cramps, nausea, vomiting, diarrhoea, dizziness and drowsiness.
Skin contact	Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.
Eye contact	Vapour, mist or fume may cause eye irritation. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes.

4.3 Indication of any immediate medical attention and special treatment needed

Product name Methanol	Product code 0000001094	Page: 3/45
Version 6	Date of issue 27 December 2019	Format United Kingdom (UK) (United Kingdom)
		Language ENGLISH

SECTION 4: First aid measures

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects.

The onset of symptoms may be delayed. Do not wait for symptoms to develop. Significant quantities of methanol can be absorbed by ingestion, inhalation and through intact skin. Methanol causes central nervous system (CNS) depression and its metabolites cause metabolic acidosis and may lead to permanent visual impairment. If casualty vomits and/or loses consciousness maintain a patent airway and give cardio-pulmonary resuscitation (CPR) as necessary. Gastric aspiration/lavage should be considered to prevent aspiration of vomit. Metabolic acidosis should be corrected. Metabolism of methanol may be blocked by administration of ethanol. Haemodialysis may be required in severe cases.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media

Do not use water jet. The use of a water jet may cause the fire to spread by splashing the burning product.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Highly flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Vapours can form explosive mixtures with air. Vapours are heavier than air and can spread along the ground or float on water surfaces to remote ignition sources. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Burns with an almost invisible flame.

Hazardous combustion products

Combustion products may include the following:
carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide)

5.3 Advice for firefighters

Special precautions for fire-fighters

No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. Cool containers with water jet in order to prevent pressure build-up, auto-ignition or explosion. Use water spray curtain to divert vapour drift. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Eliminate all ignition sources. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. No flares, smoking or flames in hazard area. Do not breathe vapour or mist. Provide adequate ventilation. Put on appropriate personal protective equipment.

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapour, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Storage tanks must be positioned within a bunded area. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Product name Methanol

Product code 0000001094

Page: 4/45

Version 6

Date of issue 27 December 2019

Format United Kingdom (UK) (United Kingdom)

Language ENGLISH

SECTION 6: Accidental release measures

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilt product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 5 for firefighting measures.
See Section 8 for information on appropriate personal protective equipment.
See Section 12 for environmental precautions.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Do not reuse container. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep away from heat and direct sunlight. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/containers designed for use with this product. Do not store in unlabelled containers.

Do not remove warning labels from containers. To avoid moisture contamination, store under a nitrogen blanket or fit a desiccant unit in the tank vent line. Use appropriate containment to avoid environmental contamination.

Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry to any tanks or other confined space requires a full risk assessment and appropriate control measures to be put in place in conformance with appropriate regulations and industry practice on confined space entry. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure equipment used is properly earthed or bonded to the tank structure.

Explosive air/vapour mixtures may form at ambient temperature.

If product comes into contact with hot surfaces, or leaks occur from pressurised fuel pipes, the vapour or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Not suitable

Do not store in: Aluminium. (and its alloys), zinc, PVC. Incompatible with lead and its alloys.

7.3 Specific end use(s)

Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

Product name Methanol

Version 6

Date of issue 27 December 2019

Product code 0000001094

Page: 5/45

Format United Kingdom (UK) (United Kingdom)

Language ENGLISH

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters**Occupational exposure limits**

Product/ingredient name	Exposure limit values
methanol	EH40/2005 WELs (United Kingdom (UK)). Absorbed through skin. STEL: 333 mg/m ³ 15 minutes. Issued/Revised: 1/1997 STEL: 250 ppm 15 minutes. Issued/Revised: 1/1997 TWA: 266 mg/m ³ 8 hours. Issued/Revised: 1/1997 TWA: 200 ppm 8 hours. Issued/Revised: 1/1997

Whilst specific OELs for certain components may be shown in this section, other components may be present in any mist, vapour or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level

Product/ingredient name	Type	Exposure	Value	Population	Effects
Methanol	DNEL	Short term Dermal -	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal -	4 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal -	20 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal -	20 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation -	26 mg/m ³	General population	Local
	DNEL	Long term Inhalation -	26 mg/m ³	General population	Local
	DNEL	Short term Inhalation -	26 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation -	26 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation -	130 mg/m ³	Workers	Local
	DNEL	Long term Inhalation -	130 mg/m ³	Workers	Local
	DNEL	Short term Inhalation -	130 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation -	130 mg/m ³	Workers	Systemic
	DNEL	Short term Oral -	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral -	4 mg/kg bw/day	General population	Systemic

Predicted No Effect Concentration

No PNECs available

8.2 Exposure controls

Product name Methanol	Product code 0000001094	Page: 6/45
Version 6	Date of issue 27 December 2019	Format United Kingdom (UK) (United Kingdom)
		Language ENGLISH

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

If local exhaust ventilation or other methods of ventilation are not possible or are insufficient, wear suitable respiratory protective devices. Wear suitable respiratory protective devices if there is a risk of exposure limits being exceeded. The choice of suitable respiratory device will depend upon a risk assessment of the workplace environment and the task being carried out. If required, the respiratory device must be certified as safe in defined explosive atmospheres (EX Label). Respiratory protective devices must be checked to ensure they fit correctly each time they are worn. Please consult European standard EN 529 for further guidance on the selection, use, care and maintenance of respiratory protective devices.

Suitable breathing apparatus (independent of ambient atmosphere) must be worn if any of the following situations apply.

- When the workplace atmosphere is considered to be immediately dangerous to life and health.
- When there is a risk of the workplace atmosphere being oxygen deficient.
- When the workplace atmosphere is uncontrolled.
- When the workplace atmosphere is unknown.
- When there is a risk of loss of consciousness or asphyxiation
- When entry into a confined space is required.
- When there is a risk of gases being released that could be a fire or explosion hazard.
- When the concentration of contaminants in the atmosphere exceeds the level of protection (maximum allowed concentration) given by a filtering device
- When the contaminants have a low odour that would not be tasted or smelt by the wearer of a filtering device if the filter became exhausted or saturated.
- When there is a risk of hydrogen sulphide exposure limits being exceeded.

Use with adequate ventilation.

If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

Recommended: Gas filter suitable for gases and vapours. Filter type: AX
Combined filter suitable for gases, vapours and particles (dust, smoke, mist, aerosol). Filter type: AXP

Eye/face protection

Recommended: Chemical splash goggles. Face shield.

Skin protection

Hand protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Wear chemical resistant gloves.

Do not re-use gloves.

Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis.

Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture).

The frequency of replacement will depend upon the circumstances of use.

Product name Methanol

Product code 0000001094

Page: 7/45

Version 6

Date of issue 27 December 2019

Format United Kingdom (UK)
(United Kingdom)

Language ENGLISH

SECTION 8: Exposure controls/personal protection

Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type. Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained.
If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.
It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Recommended: Butyl gloves.
Gloves made from fluoroelastomer resistant to hydrocarbons and a wide range of chemicals.

Skin and body

Wear suitable protective clothing.
Footwear highly resistant to chemicals.
When there is a risk of ignition wear inherently fire resistant protective clothes and gloves.
Refer to standard: ISO 11612
When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static.
Refer to standard: EN 1149
Cotton or polyester/cotton overalls will only provide protection against light superficial contamination.
When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required.
Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes.

SECTION 8: Exposure controls/personal protectionRefer to standards:

Respiratory protection: EN 529
 Gloves: EN 420, EN 374
 Eye protection: EN 166
 Filtering half-mask: EN 149
 Filtering half-mask with valve: EN 405
 Half-mask: EN 140 plus filter
 Full-face mask: EN 136 plus filter
 Particulate filters: EN 143
 Gas/combined filters: EN 14387

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**Appearance

Physical state	Liquid.
Colour	Colourless.
Odour	Pungent.
Odour threshold	2000 ppm
pH	Not applicable. Methanol is an organic solvent (100%).
Melting point/freezing point	-97.8°C (-144°F)
Initial boiling point and boiling range	64.7°C (148.5°F)
Flash point	Closed cup: 9.7°C (49.5°F)
Evaporation rate	4.1 (butyl acetate = 1)
Flammability (solid, gas)	Not applicable. Based on physical state.
Upper/lower flammability or explosive limits	Lower: 6% Upper: 36%
Vapour pressure	16.9 kPa (126.95 mm Hg) [25°C (77 °F)]
Vapour density	1.1 [Air = 1]
Relative density	Not available.
Density	790 to 800 kg/m³ (0.79 to 0.8 g/cm³) at 20°C
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	-0.77
Auto-ignition temperature	455°C (851°F)
Decomposition temperature	Not applicable. Endpoint waived according to REACH Annex VII, IX or XI
Viscosity	Dynamic: 0.001 to 0.001 Pa·s (0.544 to 0.59 cP) at 25°C
Explosive properties	Vapours may form explosive mixtures with air.
Oxidising properties	Not considered oxidizing based on structural considerations.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerisation will not occur.
10.4 Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Keep away from heat and direct sunlight. Avoid exposure to moisture or moist air.

Product name Methanol

Product code 0000001094

Page: 9/45

Version 6

Date of issue 27 December 2019


Format United Kingdom (UK)
(United Kingdom)

Language ENGLISH

SECTION 10: Stability and reactivity**10.5 Incompatible materials** Reactive or incompatible with the following materials: oxidising materials and acids.**10.6 Hazardous decomposition products** Under normal conditions of storage and use, hazardous decomposition products should not be produced.**SECTION 11: Toxicological information****11.1 Information on toxicological effects**Acute toxicity

Product/ingredient name	Result / Route	Test authority / Number	Species	Dose	Exposure	Remarks
methanol	LC50 Inhalation Vapour	not guideline -	Rat	128.2 mg/l	4 hours	Based on methanol
	LC50 Inhalation Vapour	not guideline -	Rat	130.7 mg/l	4 hours	Based on methanol
	LC50 Inhalation Vapour	not guideline -	Rat	>115.9 mg/l	4 hours	Based on methanol
	LC50 Inhalation Vapour	not guideline -	Rat	87.5 mg/l	6 hours	Based on methanol
	LC50 Inhalation Vapour	not guideline -	Rat	92.6 mg/l	6 hours	Based on methanol
	LC50 Inhalation Vapour	not guideline -	Rat	82.1 mg/l	6 hours	Based on methanol
	LD50 Oral	not guideline -	Rat	>1187 mg/kg	-	Based on methanol

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
 methanol	100	300	N/A	3	N/A

Irritation/Corrosion

Product/ingredient name	Test authority / Test number	Species	Route / Result	Test concentration	Remarks
methanol	not guideline -	Rabbit	Skin - Non-irritant to skin.	-	Based on methanol
	not guideline -	Rabbit	Eyes - Non-irritating to the eyes.	-	Based on methanol

Sensitiser

Product/ingredient name	Route	Test authority / Test number	Species	Result	Remarks
methanol	skin	OECD 406	Guinea pig	Not sensitising	Based on methanol

GERM CELL MUTAGENICITY

SECTION 11: Toxicological information

Product/ingredient name	Test authority / Test number	Cell	Type	Result	Remarks	
methanol	OECD 471	-	Experiment: In vitro	Subject: Mammalian-Animal	Negative	Based on methanol
	OECD 476	-	Experiment: In vitro	Subject: Mammalian-Animal	Negative	Based on methanol
	-	Cell: Somatic	Experiment: In vitro	Subject: Mammalian-Animal	Negative	Based on methanol
	OECD 474	Cell: Somatic	Experiment: In vivo	Subject: Mammalian-Animal	Negative	Based on methanol
	OECD 473	Cell: Somatic	Experiment: In vivo	Subject: Mammalian-Animal	Negative	Based on methanol

Conclusion/Summary

Not classified. Based on available data, the classification criteria are not met.

Carcinogenicity

Product/ingredient name	Test authority / Test number	Species	Route	Exposure	Result	Remarks
methanol	OECD 453	Mouse	Inhalation	24 months	Negative	Based on methanol
	OECD 453	Rat	Inhalation	24 months	Negative	Based on methanol

Conclusion/Summary

Not classified. Based on available data, the classification criteria are not met.


Reproductive toxicity

Product/ingredient name	Test authority / Test number	Species	Route	Exposure	Developmental	Maternal toxicity	Fertility	Remarks
methanol	Equivalent to OECD 414	Rat	Inhalation	2 generation	-	-	Negative	Based on methanol
	Equivalent to OECD 414	Mouse	Inhalation	2 generation	-	-	Negative	Based on methanol
	Equivalent to OECD 414	Rat	Inhalation	10 days	Negative	-	Negative	Based on methanol
	Equivalent to OECD 414	Mouse	Inhalation	5 days	Negative	-	Negative	Based on methanol

Conclusion/Summary

Development: Not classified. Based on available data, the classification criteria are not met.
 Fertility: Not classified. Based on available data, the classification criteria are not met.
 Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.

Conclusion/Summary

 Aspiration hazard: Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity

Product/ ingredient name	Hazard	Test authority / Test number		Species	Route	Type	Dose	Exposure	Target organs	Remarks
methanol	STOT - SE	-	-	Mammal - species unspecified	Oral	LOAEL	2000 mg/ kg	-	Eyes	Based on methanol
	STOT - RE	OECD	453	Mammal - species unspecified	Inhalation	NOAEC	0.13 mg/l	20 hours / days	heart brain liver	Based on methanol

Product name Methanol**Product code** 0000001094**Page:** 11/45**Version** 6**Date of issue** 27 December 2019
Format United Kingdom (UK)
(United Kingdom)
Language ENGLISH

SECTION 11: Toxicological information

Conclusion/Summary STOT - SE: Causes damage to organs.
STOT - RE: Not classified. Based on available data, the classification criteria are not met.
Assessment was by using a weight of evidence approach.

Information on likely routes of exposure Routes of entry anticipated: Dermal, Inhalation.
Routes of entry not anticipated: Oral.

Potential acute health effects

Inhalation Toxic if inhaled.

Ingestion Toxic if swallowed.

Skin contact Toxic in contact with skin.

Eye contact No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Ingestion No specific data.

Skin contact No specific data.

Eye contact No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Inhalation Solvent "sniffing" (abuse) or intentional overexposure to vapours can produce serious central nervous system effects, including unconsciousness, and possibly death. May be harmful by inhalation if exposure to vapour, mists or fumes resulting from thermal decomposition products occurs. Vapour, mist or fume may irritate the nose, mouth and respiratory tract.

Ingestion May be fatal or cause blindness if swallowed. If swallowed, may irritate the mouth, throat and digestive system. If swallowed, may cause abdominal pain, stomach cramps, nausea, vomiting, diarrhoea, dizziness and drowsiness.

Skin contact Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Eye contact Vapour, mist or fume may cause eye irritation. Exposure to vapour, mist or fume may cause stinging, redness and watering of the eyes.

Potential chronic health effects

General Ingestion of methanol or gross overexposure to methanol vapours or mist can cause blindness, metabolic acidosis and can be fatal. It can cause headache, giddiness, gastrointestinal disturbances, fatigue, inebriation, irritability, narcosis, and eye irritation. Prolonged or repeated skin contact with methanol can also cause poisoning. Death from ingestion of less than 30 ml has been reported in humans.

Carcinogenicity No known significant effects or critical hazards.

Mutagenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

SECTION 12: Ecological information**12.1 Toxicity**

Product/ingredient name	Test authority / Test number	Species	Type / Result	Exposure	Effects	Remarks
methanol	OECD 201	Algae	Acute EC50 22000 mg/l Fresh water	96 hours	-	Based on methanol
	EPA 850.54	Algae	Acute EC50 22000 mg/l Fresh water	96 hours	-	Based on methanol
	DIN 38412 Teil 11	Other	Acute EC50 >10000 mg/l Fresh water	48 hours	-	Based on methanol
	EPA 660/3-75-009	Fish	Acute LC50 15400 mg/l Fresh water	96 hours	-	Based on methanol

Environmental hazards Not classified as dangerous

12.2 Persistence and degradability

This product is readily biodegradable.

Product name Methanol	Product code 0000001094	Page: 12/45
Version 6	Date of issue 27 December 2019	Format United Kingdom (UK) (United Kingdom)
		Language ENGLISH

SECTION 12: Ecological information

Product/ingredient name	Test authority / Test number	Result - Exposure	Remarks
methanol	not guideline	82.7 % - Readily - 5 days	Based on methanol
	not guideline	82.7 % - Readily - 10 days	Based on methanol
	not guideline	82.7 % - Readily - 15 days	Based on methanol
	not guideline	82.7 % - Readily - 20 days	Based on methanol

12.3 Bioaccumulative potential

In accordance with column 2 of REACH Annex VIII, a bioaccumulation study need not be conducted if the substance has a low potential for bioaccumulation (for instance a log Kow <3).

Product/ingredient name	LogP _{ow}	BCF	Potential
methanol	-0.77	<10	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc})

Not available.

Mobility

The product is poorly absorbed onto soils or sediments.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
methanol	No	N/A	No	No	No	N/A	No

12.6 Other adverse effects

Other ecological information

This product is likely to volatilise rapidly into the air because of its high vapour pressure. The product will dissolve rapidly in water.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal

Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Hazardous waste

Yes.

European waste catalogue (EWC)

Waste code	Waste designation
07 01 04*	other organic solvents, washing liquids and mother liquors

However, deviation from the intended use and/or the presence of any potential contaminants may require an alternative waste disposal code to be assigned by the end user.

Packaging

Methods of disposal

Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Special precautions

This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Empty containers represent a fire hazard as they may contain flammable product residues and vapour. Never weld, solder or braze empty containers. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Empty packages may contain some remaining product. Hazard warning labels are a guide to the safe handling of empty packaging and should not be removed.

References

Commission 2014/955/EU
Directive 2008/98/EC

Product name Methanol

Product code 0000001094

Page: 13/45









Version 6

Date of issue 27 December 2019

Format United Kingdom (UK)
(United Kingdom)

Language ENGLISH

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1230	UN1230	UN1230	UN1230
14.2 UN proper shipping name	Methanol	Methanol	Methanol	Methanol
14.3 Transport hazard class(es)	3 (6.1)  	3 (6.1)  	3 (6.1)  	3 (6.1)  
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.
Additional information	Hazard identification number 336 Tunnel code D/E	Remarks Table: C. Danger: 3+6.1	Emergency schedules F-E, S-D	-

14.6 Special precautions for user Not available.

UK Emergency Action Code: •2WE

ADR/RID Classification code: FT1

ADN Classification code: FT1

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Proper shipping name	Methyl alcohol
Ship type	3
Pollution category	Y

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU Regulation (EC) No. 1907/2006 (REACH)****Annex XIV - List of substances subject to authorisation****Annex XIV**

None of the components are listed.


Substances of very high concern

None of the components are listed.

Other regulations**REACH Status**

The company, as identified in Section 1, sells this product in the EU in compliance with the current requirements of REACH.

United States inventory (TSCA 8b)

 This material is active or exempted.

Australia inventory (AICS)

This material is listed or exempted.

Canada inventory

This material is listed or exempted.

China inventory (IECSC)

This material is listed or exempted.

Japan inventory (ENCS)

This material is listed or exempted.

Korea inventory (KECI)

This material is listed or exempted.

Philippines inventory (PICCS)

This material is listed or exempted.

Taiwan Chemical Substances Inventory (TCSI)

This material is listed or exempted.

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Product name Methanol

Product code 0000001094

Page: 14/45

Version 6

Date of issue 27 December 2019

Format United Kingdom (UK)
(United Kingdom)

Language ENGLISH

SECTION 15: Regulatory information

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Named substances

Name
Methanol

15.2 Chemical safety assessment

Complete.

SECTION 16: Other information**Abbreviations and acronyms**

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 CAS = Chemical Abstracts Service
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 CSA = Chemical Safety Assessment
 CSR = Chemical Safety Report
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EINECS = European Inventory of Existing Commercial chemical Substances
 ES = Exposure Scenario
 EUH statement = CLP-specific Hazard statement
 EWC = European Waste Catalogue
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 OECD = Organisation for Economic Co-operation and Development
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
 RRN = REACH Registration Number
 SADT = Self-Accelerating Decomposition Temperature
 SVHC = Substances of Very High Concern
 STOT-RE = Specific Target Organ Toxicity - Repeated Exposure
 STOT-SE = Specific Target Organ Toxicity - Single Exposure
 TWA = Time weighted average
 UN = United Nations
 UVCB = Complex hydrocarbon substance
 VOC = Volatile Organic Compound
 vPvB = Very Persistent and Very Bioaccumulative
 Varies = may contain one or more of the following 64741-88-4 / RRN 01-2119488706-23, 64741-89-5 / RRN 01-2119487067-30, 64741-95-3 / RRN 01-2119487081-40, 64741-96-4 / RRN 01-2119483621-38, 64742-01-4 / RRN 01-2119488707-21, 64742-44-5 / RRN 01-2119985177-24, 64742-45-6, 64742-52-5 / RRN 01-2119467170-45, 64742-53-6 / RRN 01-2119480375-34, 64742-54-7 / RRN 01-2119484627-25, 64742-55-8 / RRN 01-2119487077-29, 64742-56-9 / RRN 01-2119480132-48, 64742-57-0 / RRN 01-2119489287-22, 64742-58-1, 64742-62-7 / RRN 01-2119480472-38, 64742-63-8, 64742-65-0 / RRN 01-2119471299-27, 64742-70-7 / RRN 01-2119487080-42, 72623-85-9 / RRN 01-2119555262-43, 72623-86-0 / RRN 01-2119474878-16, 72623-87-1 / RRN 01-2119474889-13

Full text of abbreviated H statements

H225 Highly flammable liquid and vapour.
 H301 Toxic if swallowed.
 H311 Toxic in contact with skin.
 H331 Toxic if inhaled.
 H370 Causes damage to organs.

Product name Methanol**Product code** 0000001094**Page:** 15/45**Version** 6**Date of issue** 27 December 2019**Format** United Kingdom (UK) (United Kingdom)**Language** ENGLISH

SECTION 16: Other information

Full text of classifications [CLP/GHS]	Acute Tox. 3, H301	ACUTE TOXICITY (oral) - Category 3
	Acute Tox. 3, H311	ACUTE TOXICITY (dermal) - Category 3
	Acute Tox. 3, H331	ACUTE TOXICITY (inhalation) - Category 3
	Flam. Liq. 2, H225	FLAMMABLE LIQUIDS - Category 2
	STOT SE 1, H370	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1

History

Date of issue/ Date of revision	27/12/2019.
Date of previous issue	06/02/2019.
Prepared by	Product Stewardship

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

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Product name Methanol

Product code 0000001094

Page: 16/45

Version 6

Date of issue 27 December 2019

Format United
Kingdom
(UK)
(United Kingdom)

Language ENGLISH



Annex to the extended Safety Data Sheet (eSDS)

Consumer

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in cleaning agents, De-icers (Liquid products) (methanol) - Consumer
List of use descriptors	Identified use name: Cleaning agents and De-icers (Liquid products) - Consumer Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a, ERC08d Market sector by type of chemical product: PC04, PC35

Processes and activities covered by the exposure scenario	Anti-freeze and de-icing products / Use in cleaning agents
Assessment Method	See Section 3

Section 2: Operational conditions and risk management measures

Section 2.1: Control of consumer exposure

Concentration of substance in mixture or article	Covers concentrations up to 1%
Amounts used:	Inhalation: 100g; Dermal: 5g
Frequency and duration of use:	197 times per year Inhalation: Exposure duration: 240 minutes Application duration: 20 minutes
Human factors not influenced by risk management:	Exposed skin surface (dermal): 2200 cm ²
Other given operational conditions affecting consumers exposure:	Inhalation: Room volume: 58 m ³ , Ventilation rate: 0.5 ach (air changes per hour), Release area: 5.00E4cm ² , Temperature: 20 °C Dermal: Uptake fraction 100%

Contributing scenarios: Operational conditions and risk management measures

Product category(ies) 4: Anti-freezing agents - De-icing agents

Operations Conditions (consumer): No additional remark.

Risk management measures (RMM): No specific risk management measure identified beyond those operational conditions stated.

Product category(ies) 35: Washing and cleaning products

Operations Conditions (consumer): No additional remark.

Risk management measures (RMM): No specific risk management measure identified beyond those operational conditions stated.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3 Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment):	No exposure estimation and risk characterization required
Exposure estimation and reference to its source	Not available.

Methanol

**Use in cleaning agents, De-icers (Liquid products)
(methanol) - Consumer**

Exposure estimation and reference to its source - Consumers

Exposure assessment (human):	Not available.
Exposure estimation and reference to its source	Not available.

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

Environment	No exposure estimation and risk characterization required
Health	Not available.



Annex to the extended Safety Data Sheet (eSDS)

Consumer

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in cleaning agents, De-icers (spray) (methanol) - Consumer
List of use descriptors	Identified use name: Cleaning agents and De-icers (spray) - Consumer Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a, ERC08d Market sector by type of chemical product: PC04, PC35

Processes and activities covered by the exposure scenario	Anti-freeze and de-icing products / Use in cleaning agents
Assessment Method	See Section 3

Section 2: Operational conditions and risk management measures

Section 2.1: Control of consumer exposure

Concentration of substance in mixture or article	Covers concentrations up to 5%
Other given operational conditions affecting consumers exposure:	Inhalation: Room volume: 15 m ³ , Ventilation rate: 2.5 ach (air changes per hour), Dermal: Uptake fraction 100%

Contributing scenarios: Operational conditions and risk management measures

Product category(ies) 4: Anti-freezing agents - De-icing agents, 35: Washing and cleaning products - Cleaning Operations Conditions (consumer): Inhalation exposure: 60 minute(s), Application duration 10 minute(s). spray application: No. Amounts used: Inhalation: 16.2g, Dermal: 0.160g. Skin surface potentially exposed: 215cm². Inhalation: Release are is constant. Release area: 1.71E4 cm², Temperature: 20°C.
Risk management measures (RMM): No specific risk management measure identified beyond those operational conditions stated.

Product category(ies) 4: Anti-freezing agents - De-icing agents, 35: Washing and cleaning products - Spraying Operations Conditions (consumer): Inhalation exposure Spray duration: 13.8 seconds; Dermal exposure Release duration 28 seconds. spray application: Yes. Skin surface potentially exposed: 2200cm². Inhalation: Density Non-volatile.: 5%.
Risk management measures (RMM): No specific risk management measure identified beyond those operational conditions stated.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3 Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment):	No exposure estimation and risk characterization required
Exposure estimation and reference to its source	Not available.

Exposure estimation and reference to its source - Consumers

Exposure assessment (human):	Not available.
Exposure estimation and reference to its source	Not available.

Methanol

Use in cleaning agents, De-icers (spray) (methanol) -
Consumer

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

Environment	No exposure estimation and risk characterization required
Health	Not available.



Annex to the extended Safety Data Sheet (eSDS)

Consumer

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in fuel, Fuel additive. (Outdoor use) (methanol) - Consumer
List of use descriptors	Identified use name: Use in fuel, Fuel additive. (Outdoor use) - Consumer Subsequent service life relevant for that use: No. Environmental Release Category: ERC08e Market sector by type of chemical product: PC13

Processes and activities covered by the exposure scenario	Fuel additive.
Assessment Method	See Section 3

Section 2: Operational conditions and risk management measures

Section 2.1: Control of consumer exposure

Amounts used:	Dermal: 10g
Frequency and duration of use:	2 days per week Inhalation: Exposure duration: 10 minutes Application duration: 10 minutes
Human factors not influenced by risk management:	Exposed skin surface (dermal): 430 cm ²
Other given operational conditions affecting consumers exposure:	Inhalation: Room volume: 20 m ³ , Ventilation rate: 0.5 ach (air changes per hour), Release are is constant. Release area: 2 cm ² , Temperature: 20 °C Dermal: Uptake fraction 100%

Contributing scenarios: Operational conditions and risk management measures

Product category(ies) 13: Fuel
Operations Conditions (consumer):
Frequency and duration of use: 2 days per week, 3% by weight, Amounts used (Inhalation): 5.00E4g
2% by weight: Amounts used (Inhalation): 10g
Risk management measures (RMM): No specific risk management measure identified beyond those operational conditions stated.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3 Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment):	No exposure estimation and risk characterization required
Exposure estimation and reference to its source	Not available.

Exposure estimation and reference to its source - Consumers

Exposure assessment (human):	Not available.
Exposure estimation and reference to its source	Not available.

Methanol

Use in fuel, Fuel additive. (Outdoor use) (methanol) - Consumer

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

Environment	No exposure estimation and risk characterization required
Health	Not available.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Distribution (methanol)
List of use descriptors	Identified use name: Distribution of substance Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC01, ERC02

Processes and activities covered by the exposure scenario	Loading (including marine vessel/barge, rail/road car and IBC loading) and repacking (including drums and small packs) of substance, including its sampling, storage, unloading distribution and associated laboratory activities.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
-----------------	---

Concentration of substance in product: Covers percentage substance in the product up to 100 %.

Frequency and duration of use: Duration: >4 hours
Frequency: 5 workdays/week.

Human factors not influenced by risk management: Exposed skin surface 480 cm², Unless otherwise stated.

Other conditions affecting workers exposure: Assumes use at not more than 20°C above ambient temperature.
Assumes a good basic standard of occupational hygiene is implemented

Area of use: Indoor

Ventilation control measures: Yes. (Inhalation 90%) Unless otherwise stated.
Provide extract ventilation to points where emissions occur.

Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: No specific measures identified.

Closed systems Continuous process With occasional controlled exposure: No specific risk management measure identified beyond those operational conditions stated.

Use in contained batch processes (Synthesis or Formulation): Covers skin contact area up to 240 cm²

Batch process With sample collection: No specific risk management measure identified beyond those operational conditions stated.

Bulk transfers Non-dedicated facility: Covers skin contact area up to 960cm²

Bulk transfers Dedicated facility: Covers skin contact area up to 960 cm². Local exhaust ventilation: Yes. (Inhalation 95%)

Transfer of substance or mixture into small containers (dedicated filling line, including weighing): No specific risk management measure identified beyond those operational conditions stated.

Personal protection: Wear suitable gloves tested to EN374.

Respiratory protection: No.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Not available.

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Formulation and (re)packing of substances and mixtures (methanol)
List of use descriptors	Identified use name: Formulation and (re)packing of substances and mixtures Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC09, PROC15 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC02

Processes and activities covered by the exposure scenario	Formulation, packing and re-packing of the substance and its mixtures in batch or continuous operations, including storage, materials transfers, mixing, tableting, compression, pelletisation, extrusion, large and small scale packing, sampling, maintenance and associated laboratory activities.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
-----------------	---

Concentration of substance in product: Covers percentage substance in the product up to 100 %.

Frequency and duration of use: Duration: >4 hours
Frequency: 5 workdays/week.

Human factors not influenced by risk management: Exposed skin surface: 240 cm², Unless otherwise stated.

Other conditions affecting workers exposure: Assumes use at not more than 20°C above ambient temperature.
Assumes a good basic standard of occupational hygiene is implemented

Area of use: Indoor

Ventilation control measures: Yes. (Inhalation 90%) Unless otherwise stated.
Provide extract ventilation to points where emissions occur.

Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: No specific measures identified.

Closed systems Continuous process With occasional controlled exposure: Covers skin contact area up to 480 cm²

Use in contained batch processes (Synthesis or Formulation): No specific risk management measure identified beyond those operational conditions stated.

Batch process With sample collection: Covers skin contact area up to 480 cm²

Bulk transfers Non-dedicated facility: Covers skin contact area up to 960 cm²

Bulk transfers Dedicated facility: Covers skin contact area up to 960 cm²

Transfer of substance or mixture into small containers (dedicated filling line, including weighing): Covers skin contact area up to 480 cm²

Laboratory activities: No specific risk management measure identified beyond those operational conditions stated.

Personal protection: Wear suitable gloves tested to EN374.

Respiratory protection: No.

Methanol

Formulation and (re)packing of substances and mixtures (methanol)

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Not available.

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Manufacture (methanol)
List of use descriptors	Identified use name: Manufacture of substance Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC15 Substance supplied to that use in form of: As such, In a mixture Sector of end use: SU08, SU09 Subsequent service life relevant for that use: No. Environmental Release Category: ERC01, ERC04, ERC06a, ERC06b

Processes and activities covered by the exposure scenario	Manufacture of the substance or use as a process chemical or extraction agent. Includes recycling/recovery, material transfers, storage, maintenance and loading (including marine vessel/barge, road/rail car and bulk container), sampling and associated laboratory activities.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
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Concentration of substance in product: Covers percentage substance in the product up to 100 %.

Frequency and duration of use: Duration: >4 hours.
Frequency: 5 workdays/week.

Human factors not influenced by risk management: Exposed skin surface: 240 cm², Unless otherwise stated.

Other conditions affecting workers exposure: Assumes use at not more than 20°C above ambient temperature.
Assumes a good basic standard of occupational hygiene is implemented

Area of use: Indoor

Ventilation control measures: Yes. (Inhalation 90%) Unless otherwise stated.
Provide extract ventilation to points where emissions occur.

Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: No specific measures identified.

Closed systems Continuous process With occasional controlled exposure: Covers skin contact area up to 480cm²

Use in contained batch processes (Synthesis or Formulation): No specific risk management measure identified beyond those operational conditions stated.

Batch process With sample collection: Covers skin contact area up to 480cm²

Bulk transfers Non-dedicated facility: Covers skin contact area up to 960cm²

Bulk transfers Dedicated facility: Covers skin contact area up to 960cm². Local exhaust ventilation: Yes. (Inhalation 95%)

Laboratory activities: No specific risk management measure identified beyond those operational conditions stated.

Personal protection: Wear suitable gloves tested to EN374.

Respiratory protection: No.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Not available.

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in fuel (methanol) - Industrial
List of use descriptors	Identified use name: Use in fuel - Industrial Process Category: PROC01, PROC02, PROC03, PROC08a, PROC08b, PROC16, PROC19 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC07

Processes and activities covered by the exposure scenario	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
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Concentration of substance in product:	Covers percentage substance in the product up to 100% Unless otherwise stated.
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Frequency and duration of use:	Duration: >4 hours, Unless otherwise stated. Frequency: 5 workdays/week.
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Human factors not influenced by risk management:	Exposed skin surface: 240 cm ² Unless otherwise stated.
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Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
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Area of use:	Indoor
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Ventilation control measures:	Yes. (Inhalation 90%) Unless otherwise stated. Provide extract ventilation to points where emissions occur.
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Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: No specific measures identified.

Closed systems Continuous process With occasional controlled exposure: Covers skin contact area up to 480 cm²

Use in contained batch processes (Synthesis or Formulation): No specific risk management measure identified beyond those operational conditions stated.

Use in fuel Closed systems: No specific risk management measure identified beyond those operational conditions stated.

Use in fuel Closed systems short-term: Concentration of the substance in the mixture: 5 - 25%

Mixing operations (Manual): Concentration of the substance in the mixture: 10%, Duration 1 - 4 hours, Covers skin contact area up to 1980 cm²

Bulk transfers Non-dedicated facility: Covers skin contact area up to 960 cm²

Bulk transfers Dedicated facility: Covers skin contact area up to 960 cm², Local exhaust ventilation: Yes. (Inhalation 95%)

Personal protection:	Wear suitable gloves tested to EN374.
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Respiratory protection:	No.
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Methanol

Use in fuel (methanol) - Industrial

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment Not available.

Health Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in fuel (methanol) - Professional
List of use descriptors	Identified use name: Use in fuel - Professional Process Category: PROC01, PROC02, PROC03, PROC08a, PROC08b, PROC16, PROC19 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC08b, ERC08e

Processes and activities covered by the exposure scenario	Covers the use as a fuel (or fuel additive) and includes activities associated with its transfer, use, equipment maintenance and handling of waste.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
Concentration of substance in product:	Covers percentage substance in the product up to 100 %. Unless otherwise stated.
Frequency and duration of use:	Duration: >4 hours, Unless otherwise stated. Frequency: 5 workdays/week.
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Area of use:	Indoor
Ventilation control measures:	No. Unless otherwise stated.

Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: No specific measures identified.

Closed systems Continuous process With occasional controlled exposure: Covers skin contact area up to 480 cm², Local exhaust ventilation: Yes. (Inhalation 80%)

Use in contained batch processes (Synthesis or Formulation): Local exhaust ventilation: Yes. (Inhalation 80%)

Bulk transfers Non-dedicated facility: Concentration of the substance in the mixture: 5%, Covers skin contact area up to 960 cm²

Bulk transfers Dedicated facility: Concentration of the substance in the mixture: 5%, Covers skin contact area up to 960 cm²

Use in fuel Closed systems: No specific risk management measure identified beyond those operational conditions stated.

Use in fuel Closed systems short-term: Concentration of the substance in the mixture: 5 - 25%, Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour).

Mixing operations (Manual): Concentration of the substance in the mixture: 10%, Duration: 1 - 4 hours, Covers skin contact area up to 1980 cm²

Personal protection: Wear suitable gloves tested to EN374.

Respiratory protection: No.

Methanol

Use in fuel (methanol) - Professional

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment Not available.

Health Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in cleaning agents (methanol) - Industrial
List of use descriptors	Identified use name: Use in cleaning agents - Industrial Process Category: PROC01, PROC02, PROC03, PROC04, PROC07, PROC08a, PROC08b, PROC10, PROC13 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC04

Processes and activities covered by the exposure scenario	Covers the use as a component of cleaning products including transfer from storage, pouring/unloading from drums or containers. Exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping, automated and by hand), related equipment cleaning and maintenance.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
Concentration of substance in product:	Covers percentage substance in the product up to 100 %. Unless otherwise stated.
Frequency and duration of use:	Duration: >4 hours Frequency: 5 workdays/week.
Human factors not influenced by risk management:	Exposed skin surface: 480 cm ²
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Area of use:	Indoor
Ventilation control measures:	Yes. (Inhalation 90%) Provide extract ventilation to points where emissions occur.

Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: Covers skin contact area up to 240 cm²

Closed systems Continuous process With occasional controlled exposure: No specific risk management measure identified beyond those operational conditions stated.

Use in contained batch processes (Synthesis or Formulation): Covers skin contact area up to 240 cm²

Batch process With sample collection: No specific risk management measure identified beyond those operational conditions stated.

Spraying - Industrial: Concentration of the substance in the mixture: 25 %, Covers skin contact area up to 1500 cm². Provide a good standard of general ventilation (not less than 3 to 5 air changes per hour)., Respiratory protection: Yes. (Efficiency of at least 90 %)

Bulk transfers Non-dedicated facility: Covers skin contact area up to 960 cm²

Bulk transfers Dedicated facility: Covers skin contact area up to 960 cm²

Manual applications e.g. brushing, rolling: Concentration of the substance in the mixture: 80 %, Covers skin contact area up to 960 cm²

Methanol

Use in cleaning agents (methanol) - Industrial

Treatment of articles by dipping and pouring: No specific risk management measure identified beyond those operational conditions stated.

Personal protection:

Wear suitable gloves tested to EN374.

Respiratory protection:

No. Unless otherwise stated.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Not available.

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use as laboratory reagent (methanol) - Industrial
List of use descriptors	Identified use name: Use as laboratory reagent - Industrial Process Category: PROC10, PROC15 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC04

Processes and activities covered by the exposure scenario	Use of the substance within laboratory settings, including material transfers and equipment cleaning
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
Concentration of substance in product:	Covers percentage substance in the product up to 100 %. Unless otherwise stated.
Frequency and duration of use:	Duration: >4 hours Frequency: 5 workdays/week.
Human factors not influenced by risk management:	Exposed skin surface: 240 cm ²
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Area of use:	Indoor
Ventilation control measures:	Local exhaust ventilation: Yes. (Inhalation 90 %) Handle in a fume cupboard or under extract ventilation.

Contributing scenarios: Operational conditions and risk management measures

Laboratory activities: No specific risk management measure identified beyond those operational conditions stated.

Rolling, Brushing: Covers concentrations up to 80 %, Covers skin contact area up to 960 cm²

Personal protection:	Wear suitable gloves tested to EN374.
Respiratory protection:	No.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment	
Exposure assessment (environment):	Not available.
Exposure estimation and reference to its source - Workers	
Exposure assessment (human):	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment	Not available.
Health	<p>Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.</p> <p>Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.</p>



Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use as laboratory reagent (methanol) - Professional
List of use descriptors	Identified use name: Use as laboratory reagent - Professional Process Category: PROC10, PROC15 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a

Processes and activities covered by the exposure scenario	Use of small quantities within laboratory settings, including material transfers and equipment cleaning
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
Concentration of substance in product:	Covers percentage substance in the product up to 100 %. Unless otherwise stated.
Frequency and duration of use:	Duration: >4 hours Frequency: 5 workdays/week.
Human factors not influenced by risk management:	Exposed skin surface: 240 cm ² Unless otherwise stated.
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
Area of use:	Indoor
Ventilation control measures:	Yes. (Inhalation 80 %) Handle in a fume cupboard or under extract ventilation.

Contributing scenarios: Operational conditions and risk management measures

Laboratory activities: No specific risk management measure identified beyond those operational conditions stated.

Rolling, Brushing: Covers concentrations up to 5 %, Covers skin contact area up to 240 cm²

Personal protection:	Wear suitable gloves tested to EN374.
Respiratory protection:	No.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment	
Exposure assessment (environment):	Not available.
Exposure estimation and reference to its source - Workers	
Exposure assessment (human):	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment	Not available.
Health	<p>Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.</p> <p>Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.</p>



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in oil and gas field drilling and production operations (methanol) - Industrial
List of use descriptors	Identified use name: Use in oil and gas field drilling and production operations Process Category: PROC04, PROC05, PROC08a, PROC08b Subsequent service life relevant for that use: No. Environmental Release Category: ERC07

Processes and activities covered by the exposure scenario	Oil field well drilling and production operations (including drilling muds and well cleaning) including material transfers, on-site formulation, well head operations, shaker room activities and related maintenance.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
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Concentration of substance in product:	Covers percentage substance in the product up to 5%. Unless otherwise stated.
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Frequency and duration of use:	Duration: >4 hours Unless otherwise stated. Frequency: 5 workdays/week.
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Human factors not influenced by risk management:	Exposed skin surface: 960 cm ² Unless otherwise stated.
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Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
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Area of use:	Indoor
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Ventilation control measures:	Not applicable. Unless otherwise stated.
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Contributing scenarios: Operational conditions and risk management measures

Batch process With sample collection: Covers concentrations up to 100 %, Duration 1 - 4 hours, Covers skin contact area up to 480 cm², Local exhaust ventilation: Yes. (Inhalation 90%)

Batch process Mixing operations: Covers skin contact area up to 480 cm²

Bulk transfers Non-dedicated facility: No specific risk management measure identified beyond those operational conditions stated.

Bulk transfers Dedicated facility: No specific risk management measure identified beyond those operational conditions stated.

Personal protection:	Wear suitable gloves tested to EN374.
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Respiratory protection:	No.
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Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment

Not available.

Health

Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.



Annex to the extended Safety Data Sheet (eSDS)

Industrial

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use as wastewater treatment chemical (methanol) - Industrial
List of use descriptors	Identified use name: Use as wastewater treatment chemical - Industrial Process Category: PROC02 Substance supplied to that use in form of: As such, In a mixture Subsequent service life relevant for that use: No. Environmental Release Category: ERC07

Processes and activities covered by the exposure scenario	Covers the use of the substance for the treatment of water at industrial facilities in open and closed systems.
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
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Concentration of substance in product:	Covers percentage substance in the product up to 100 %.
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Amounts used:	Not applicable.
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Frequency and duration of use:	Duration: >4 hours Frequency: 5 workdays/week.
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Human factors not influenced by risk management:	Exposed skin surface: 480 cm ²
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Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature. Assumes a good basic standard of occupational hygiene is implemented
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Area of use:	Indoor
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Ventilation control measures:	Local exhaust ventilation : Yes. (90 %)
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Contributing scenarios: Operational conditions and risk management measures

Closed systems Continuous process With occasional controlled exposure: No specific risk management measure identified beyond those operational conditions stated.

Personal protection:	Wear suitable gloves tested to EN374.
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Respiratory protection:	No.
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Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment	
Exposure assessment (environment):	Not available.
Exposure estimation and reference to its source - Workers	
Exposure assessment (human):	The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment	Not available.
Health	<p>Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.</p> <p>Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.</p>



Annex to the extended Safety Data Sheet (eSDS)

Professional

Identification of the substance or mixture

Product definition	Mono-constituent substance
Code	0000001094
Product name	Methanol

Section 1: Title

Short title of the exposure scenario	Use in cleaning agents (methanol) - Professional
List of use descriptors	Identified use name: Use in cleaning agents - Professional Process Category: PROC01, PROC02, PROC03, PROC04, PROC08a, PROC08b, PROC10, PROC11, PROC13 Subsequent service life relevant for that use: No. Environmental Release Category: ERC08a, ERC08d

Processes and activities covered by the exposure scenario	Covers the use as a component of cleaning products including pouring/unloading from drums or containers; and exposures during mixing/diluting in the preparatory phase and cleaning activities (including spraying, brushing, dipping, wiping automated and by hand).
Assessment Method	See Section 3

Section 2 Operational conditions and risk management measures

Section 2.1 Control of worker exposure

Product characteristics:

Physical state:	Liquid, vapour pressure > 10 kPa at Standard Temperature and Pressure
Concentration of substance in product:	Covers percentage substance in the product up to 100 %. Unless otherwise stated.
Frequency and duration of use:	Duration: >4 hours Frequency: 5 workdays/week.
Human factors not influenced by risk management:	Exposed skin surface: 960 cm ² Unless otherwise stated.
Other conditions affecting workers exposure:	Assumes use at not more than 20°C above ambient temperature (unless stated differently). Assumes a good basic standard of occupational hygiene is implemented
Area of use:	Indoor
Ventilation control measures:	Not applicable. Unless otherwise stated.

Contributing scenarios: Operational conditions and risk management measures

Closed process without likelihood of exposure.: Covers skin contact area up to 240 cm². No specific measures identified.

Closed systems Continuous process With occasional controlled exposure: Covers skin contact area up to 480 cm², Local exhaust ventilation: Yes. (Inhalation 80 %)

Use in contained batch processes (Synthesis or Formulation): Covers skin contact area up to 240 cm², Local exhaust ventilation: Yes. (Inhalation 80 %)

Batch process With sample collection: Duration: 1 - 4 hours, Covers skin contact area up to 480 cm², Local exhaust ventilation: Yes. (Inhalation 80 %)
short-term: Respiratory protection: Yes. (Efficiency of at least 90 %)

Bulk transfers Non-dedicated facility: Concentration of the substance in the mixture: 5 %

Bulk transfers Dedicated facility: Concentration of the substance in the mixture: 5 %

Manual applications e.g. brushing, rolling: Concentration of the substance in the mixture: 5 %

Spraying: Concentration of the substance in the mixture: 3 %, Covers skin contact area up to 1500 cm², Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training., Respiratory protection : Yes. (Efficiency of at least 90 %)

Methanol

Use in cleaning agents (methanol) - Professional

Treatment of articles by dipping and pouring: Covers skin contact area up to 480 cm², Local exhaust ventilation: Yes. (Inhalation 80 %)
short-term: Respiratory protection: Yes. (Efficiency of at least 90 %)

Personal protection: Wear suitable gloves tested to EN374. Unless otherwise stated.

Respiratory protection: No. Unless otherwise stated.

Section 2.2: Control of environmental exposure

No exposure assessment presented for the environment.

Section 3: Exposure estimation and reference to its source

Exposure estimation and reference to its source - Environment

Exposure assessment (environment): Not available.

Exposure estimation and reference to its source - Workers

Exposure assessment (human): The ECETOC TRA tool has been used to estimate workplace exposures unless otherwise indicated.

Section 4: Guidance to check compliance with the exposure scenario

Environment Not available.

Health Predicted exposures are not expected to exceed the DN(M)EL when the risk management measures/operational conditions outlined in section 2 are implemented.

Where other risk management measures/operational conditions are adopted, then users should ensure that risks are managed to at least equivalent levels.

