# KARL FISCHER REAGENT

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 8/25/2026 Version: 1.0

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

### 1.1. Product identifier

| | | |
|---|---|---|
| Product form | : | Mixture |
| Trade name | : | KARL FISCHER REAGENT |
| Product code | : | 4262A |
| Type of product | : | Solution |
| Synonyms | : | KF Reagent |

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

#### Relevant identified uses

| | | |
|---|---|---|
| Use of the substance/mixture | : | Laboratory chemicals<br>Reagent |

### 1.3. Details of the supplier of the safety data sheet

LOBA CHEMIE PVT.LTD.
107 Wode House Road, Jehangir Villa, Colaba
400005 Mumbai
INDIA
T +91 22 6663 6663, F +91 22 6663 6699
info@lobachemie.com, www.lobachemie.com

### 1.4. Emergency telephone number

| | | |
|---|---|---|
| Emergency number | : | + 91 22 6663 6663 (9:00am - 6:00 pm) |

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

| | |
|---|---|
| Flammable liquids, Category 3 | H226 |
| Acute toxicity (oral), Category 4 | H302 |
| Acute toxicity (dermal), Category 4 | H312 |
| Acute toxicity (inhalation:dust,mist) Category 4 | H332 |
| Skin corrosion/irritation, Category 1, Sub-Category 1C | H314 |
| Reproductive toxicity, Category 1A | H360FD |
| Specific target organ toxicity – Repeated exposure, Category 1 | H372 |

Full text of H- and EUH-statements: see section 16

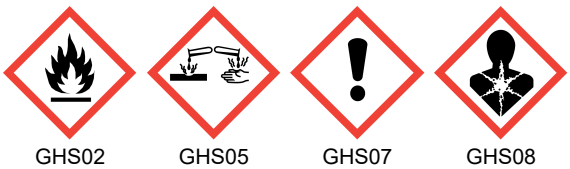
#### Adverse physicochemical, human health and environmental effects

Flammable liquid and vapour. May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure. Harmful in contact with skin. Harmful if inhaled. Harmful if swallowed. Causes severe skin burns and eye damage.

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS02 GHS05 GHS07 GHS08

| | | |
|---|---|---|
| Signal word (CLP) | : | Danger |
| Contains | : | 2-METHOXYETHANOL; IMIDAZOLE; IODINE RESUBLIMED |
| Hazard statements (CLP) | : | H226 - Flammable liquid and vapour.<br>H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.<br>H314 - Causes severe skin burns and eye damage. |

| | | |
|---|---|---|
| Precautionary statements (CLP) | : | H360FD - May damage fertility. May damage the unborn child.<br>H372 - Causes damage to organs through prolonged or repeated exposure.<br>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br>P233 - Keep container tightly closed.<br>P280 - Wear respiratory protection, protective gloves, protective clothing, eye protection, face protection.<br>P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.<br>P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water .<br>P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P308+P313 - IF exposed or concerned: Get medical advice/attention. |

### 2.3. Other hazards

Contains no PBT and/or vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

| Component | |
|---|---|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | 2-METHOXYETHANOL (109-86-4) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | 2-METHOXYETHANOL (109-86-4) |

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

| Component | |
|---|---|
| Substance(s) not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 | 2-METHOXYETHANOL (109-86-4) |

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|---|---|---|---|
| 2-METHOXYETHANOL<br>substance listed on REACH Candidate List | CAS-No.: 109-86-4<br>EC-No.: 203-713-7<br>EC Index-No.: 603-011-00-4 | 50 – 70 | Flam. Liq. 3, H226<br>Acute Tox. 4 (Oral), H302<br>Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation), H332<br>Repr. 1B, H360FD |
| IMIDAZOLIUM 2-METHOXYETHYL SULPHITE | - | 20 – 30 | Not classified |
| IODINE RESUBLIMED | CAS-No.: 7553-56-2<br>EC-No.: 231-442-4<br>EC Index-No.: 053-001-00-3 | 10 – 15 | Acute Tox. 4 (Dermal), H312<br>Acute Tox. 4 (Inhalation), H332<br>Aquatic Acute 1, H400 |
| IMIDAZOLE | CAS-No.: 288-32-4<br>EC-No.: 206-019-2<br>EC Index-No.: 613-319-00-0 | 5 – 10 | Acute Tox. 4 (Oral), H302<br>Skin Corr. 1C, H314<br>Repr. 1B, H360D |

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact : Rinse skin with water/shower. Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

Self protection of the first-aider : First-aiders should pay attention to their own protection and use the recommended personal protective equipment (see section 8).

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

Symptoms/effects after inhalation : Harmful if inhaled.

Symptoms/effects after skin contact : Harmful in contact with skin. Burns.

Symptoms/effects after eye contact : Serious damage to eyes.

Symptoms/effects after ingestion : Harmful if swallowed. Burns.

Chronic symptoms : May damage fertility. May damage the unborn child.

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

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : Flammable liquid and vapour.

Explosion hazard : No direct explosion hazard.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Firefighting instructions : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : No open flames, no sparks, and no smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust/fume/gas/mist/vapours/spray.

### For emergency responders

| | | |
|---|---|---|
| Protective equipment | : | Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : | Evacuate unnecessary personnel. Stop leak if safe to do so. |

## 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

| | | |
|---|---|---|
| For containment | : | Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : | Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
| Other information | : | Dispose of materials or solid residues at an authorized site. |

## 6.4. Reference to other sections

For further information refer to section 13.

# SECTION 7: Handling and storage

## 7.1. Precautions for safe handling

| | | |
|---|---|---|
| Additional hazards when processed | : | Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling | : | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapours may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Use only outdoors or in a well-ventilated area. |
| Hygiene measures | : | Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

## 7.2. Conditions for safe storage, including any incompatibilities

| | | |
|---|---|---|
| Technical measures | : | Ground/bond container and receiving equipment. |
| Storage conditions | : | Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. |
| Packaging materials | : | Always store product in container of same material as original container. |

### Switzerland

| | | |
|---|---|---|
| Storage class (LK) | : | LK 3 - Flammable liquids |

## 7.3. Specific end use(s)

No additional information available

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

No additional information available

## 8.2. Exposure controls

### Appropriate engineering controls

**Appropriate engineering controls:**
Ensure good ventilation of the work station.

### Personal protection equipment

**Personal protective equipment:**
Wear recommended personal protective equipment.
**Personal protective equipment symbol(s):**



### Eye and face protection

**Eye protection:**
Chemical goggles or safety glasses

### Skin protection

**Skin and body protection:**
Wear a mask

**Hand protection:**
Protective gloves

### Respiratory protection

**Respiratory protection:**
Wear appropriate mask. [In case of inadequate ventilation] wear respiratory protection.

### Environmental exposure controls

**Environmental exposure controls:**
Avoid release to the environment.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Liquid |
| Colour | : | Dark reddish brown. |
| Appearance | : | Clear liquid. |
| Odour | : | Pungent. |
| Odour threshold | : | Not available |
| Melting point | : | Not applicable |
| Freezing point | : | Not available |
| Boiling point | : | > 34 °C |
| Flammability | : | Flammable liquid and vapour. |
| Lower explosion limit | : | 1.7 Vol-% |
| Upper explosion limit | : | 20.6 Vol-% |
| Flash point | : | 33 °C |
| Auto-ignition temperature | : | 285 °C |
| Decomposition temperature | : | Not available |
| pH | : | Not available |
| Viscosity, kinematic | : | Not available |
| Solubility | : | Water: Miscible |
| Partition coefficient n-octanol/water (Log Kow) | : | Not available |
| Vapour pressure | : | Not available |
| Vapour pressure at 50°C | : | Not available |
| Density | : | 1.2 g/cm³ |
| Relative density | : | Not available |
| Relative vapour density at 20°C | : | Not available |
| Particle characteristics | : | Not applicable |

### 9.2. Other information

No additional information available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Flammable liquid and vapour.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

### 10.5. Incompatible materials

No additional information available

### 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 hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (oral) : Harmful if swallowed.
Acute toxicity (dermal) : Harmful in contact with skin.
Acute toxicity (inhalation) : Inhalation:dust,mist: Harmful if inhaled.

| KARL FISCHER REAGENT | |
|---|---|
| ATE CLP (oral) | 625 mg/kg bodyweight |
| ATE CLP (dermal) | 1294.118 mg/kg bodyweight |
| ATE CLP (dust,mist) | 1.765 mg/l/4h |

Skin corrosion/irritation : Causes severe skin burns.

| 2-METHOXYETHANOL (109-86-4) | |
|---|---|
| pH | 5 – 7 at 25 °C |

| IMIDAZOLE (288-32-4) | |
|---|---|
| pH | 9.5 – 11 |

| IODINE RESUBLIMED (7553-56-2) | |
|---|---|
| pH | 5.4 (Saturated solution) |

Serious eye damage/irritation : Assumed to cause serious eye damage

| 2-METHOXYETHANOL (109-86-4) | |
|---|---|
| pH | 5 – 7 at 25 °C |

| IMIDAZOLE (288-32-4) | |
|---|---|
| pH | 9.5 – 11 |

| IODINE RESUBLIMED (7553-56-2) | |
|---|---|
| pH | 5.4 (Saturated solution) |

Respiratory or skin sensitisation : Not classified
Germ cell mutagenicity : Not classified

| | | |
|---|---|---|
| Carcinogenicity | : | Not classified |
| Reproductive toxicity | : | May damage fertility. May damage the unborn child. |
| STOT-single exposure | : | Not classified |
| STOT-repeated exposure | : | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | : | Not classified |

| 2-METHOXYETHANOL (109-86-4) | |
|---|---|
| Viscosity, kinematic | 1.771 mm²/s |

| IMIDAZOLE (288-32-4) | |
|---|---|
| Viscosity, kinematic | Not applicable |

| IODINE RESUBLIMED (7553-56-2) | |
|---|---|
| Viscosity, kinematic | Not applicable |

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

| | | |
|---|---|---|
| Ecology - general | : | Before neutralisation, the product may represent a danger to aquatic organisms. |
| Hazardous to the aquatic environment, short–term (acute) | : | Not classified |
| Hazardous to the aquatic environment, long–term (chronic) | : | Not classified |

### 12.2. Persistence and degradability

| KARL FISCHER REAGENT | |
|---|---|
| Persistence and degradability | Rapidly degradable |

| 2-METHOXYETHANOL (109-86-4) | |
|---|---|
| Persistence and degradability | Rapidly degradable |

| IMIDAZOLE (288-32-4) | |
|---|---|
| Persistence and degradability | Rapidly degradable |

| IODINE RESUBLIMED (7553-56-2) | |
|---|---|
| Persistence and degradability | Rapidly degradable |

| IMIDAZOLIUM 2-METHOXYETHYL SULPHITE | |
|---|---|
| Persistence and degradability | Rapidly degradable |

### 12.3. Bioaccumulative potential

| 2-METHOXYETHANOL (109-86-4) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | -0.8 |

| IMIDAZOLE (288-32-4) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 0.02 |

| IODINE RESUBLIMED (7553-56-2) | |
|---|---|
| Partition coefficient n-octanol/water (Log Pow) | 2.49 |

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

| Component | |
|---|---|
| Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII | 2-METHOXYETHANOL (109-86-4) |
| Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII | 2-METHOXYETHANOL (109-86-4) |

### 12.6. Endocrine disrupting properties

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional waste regulation : Disposal must be done according to official regulations.
Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations : Disposal must be done according to official regulations.
Product/Packaging disposal recommendations : Disposal must be done according to official regulations.
Additional information : Flammable vapours may accumulate in the container. Do not re-use empty containers.
Ecological waste information : The waste of the product should be considered as hazardous as the product itself, with the likelihood of impacting the environment in the same way. Consider the handling and disposal of the waste as defined by the product itself.

## SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

### 14.1. UN number or ID number

UN-No. (ADR) : UN 1188
UN-No. (IMDG) : UN 1188
UN-No. (IATA) : UN 1188
UN-No. (ADN) : UN 1188
UN-No. (RID) : UN 1188

### 14.2. UN proper shipping name

Proper Shipping Name (ADR) : ETHYLENE GLYCOL MONOMETHYL ETHER
Proper Shipping Name (IMDG) : ETHYLENE GLYCOL MONOMETHYL ETHER
Proper Shipping Name (IATA) : Ethylene glycol monomethyl ether
Proper Shipping Name (ADN) : ETHYLENE GLYCOL MONOMETHYL ETHER
Proper Shipping Name (RID) : ETHYLENE GLYCOL MONOMETHYL ETHER
Transport document description (ADR) (ADR) : UN 1188 ETHYLENE GLYCOL MONOMETHYL ETHER, 3, III, (D/E)
Transport document description (IMDG) : UN 1188 ETHYLENE GLYCOL MONOMETHYL ETHER, 3, III (38°C c.c.)
Transport document description (IATA) : UN 1188 Ethylene glycol monomethyl ether, 3, III
Transport document description (ADN) : UN 1188 ETHYLENE GLYCOL MONOMETHYL ETHER, 3, III
Transport document description (RID) : UN 1188 ETHYLENE GLYCOL MONOMETHYL ETHER, 3, III

### 14.3. Transport hazard class(es)

**ADR**

Transport hazard class(es) (ADR) : 3
Danger labels (ADR) : 3

:




### IMDG

Transport hazard class(es) (IMDG) : 3

Danger labels (IMDG) : 3

:




### IATA

Transport hazard class(es) (IATA) : 3

Danger labels (IATA) : 3

:




### ADN

Transport hazard class(es) (ADN) : 3

Danger labels (ADN) : 3

:




### RID

Transport hazard class(es) (RID) : 3

Danger labels (RID) : 3

:




## 14.4. Packing group

Packing group (ADR) : III

Packing group (IMDG) : III

Packing group (IATA) : III

Packing group (ADN) : III

Packing group (RID) : III

## 14.5. Environmental hazards

Dangerous for the environment : No

Marine pollutant : No

EmS-No. (Fire) : F-E

EmS-No. (Spillage) : S-D

Other information : No supplementary information available

## 14.6. Special precautions for user

### Overland transport

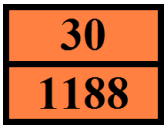
Classification code (ADR) : F1

Limited quantities (ADR) : 5l

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P001, IBC03, LP01, R001

Mixed packing provisions (ADR) : MP19

| | | |
|---|---|---|
| Portable tank and bulk container instructions (ADR) | : | T2 |
| Portable tank and bulk container special provisions (ADR) | : | TP1 |
| Tank code (ADR) | : | LGBF |
| Vehicle for tank carriage | : | FL |
| Transport category (ADR) | : | 3 |
| Special provisions for carriage - Packages (ADR) | : | V12 |
| Special provisions for carriage - Operation (ADR) | : | S2 |
| Hazard identification number (Kemler No.) | : | 30 |
| Orange plates | : |  |
| Tunnel restriction code (ADR) | : | D/E |
| EAC code | : | •2Y |

### Transport by sea

| | | |
|---|---|---|
| Limited quantities (IMDG) | : | 5 L |
| Excepted quantities (IMDG) | : | E1 |
| Packing instructions (IMDG) | : | P001, LP01 |
| IBC packing instructions (IMDG) | : | IBC03 |
| Tank instructions (IMDG) | : | T2 |
| Tank special provisions (IMDG) | : | TP1 |
| Stowage category (IMDG) | : | A |
| Flash point (IMDG) | : | 38°C c.c. |
| Properties and observations (IMDG) | : | Colourless liquid. Flashpoint: 38°C c.c. Explosive limits: 1.8% to 20%. Miscible with water. |

### Air transport

| | | |
|---|---|---|
| PCA Excepted quantities (IATA) | : | E1 |
| PCA Limited quantities (IATA) | : | Y344 |
| PCA limited quantity max net quantity (IATA) | : | 10L |
| PCA packing instructions (IATA) | : | 355 |
| PCA max net quantity (IATA) | : | 60L |
| CAO packing instructions (IATA) | : | 366 |
| CAO max net quantity (IATA) | : | 220L |
| ERG code (IATA) | : | 3L |

### Inland waterway transport

| | | |
|---|---|---|
| Classification code (ADN) | : | F1 |
| Limited quantities (ADN) | : | 5 L |
| Excepted quantities (ADN) | : | E1 |
| Carriage permitted (ADN) | : | T |
| Equipment required (ADN) | : | PP, EX, A |
| Ventilation (ADN) | : | VE01 |
| Number of blue cones/lights (ADN) | : | 0 |

### Rail transport

| | | |
|---|---|---|
| Classification code (RID) | : | F1 |
| Limited quantities (RID) | : | 5L |
| Excepted quantities (RID) | : | E1 |
| Packing instructions (RID) | : | P001, IBC03, LP01, R001 |
| Mixed packing provisions (RID) | : | MP19 |
| Portable tank and bulk container instructions (RID) | : | T2 |
| Portable tank and bulk container special provisions (RID) | : | TP1 |
| Tank codes for RID tanks (RID) | : | LGBF |
| Transport category (RID) | : | 3 |
| Special provisions for carriage – Packages (RID) | : | W12 |
| Colis express (express parcels) (RID) | : | CE4 |
| Hazard identification number (RID) | : | 30 |

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

## SECTION 15: Regulatory information

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

#### EU-Regulations

#### REACH Annex XVII (Restriction List)

| EU restriction list (REACH Annex XVII) | |
|---|---|
| **Reference code** | **Applicable on** |
| 3(a) | KARL FISCHER REAGENT ; 2-METHOXYETHANOL |
| 3(b) | KARL FISCHER REAGENT ; 2-METHOXYETHANOL |
| 30. | 2-METHOXYETHANOL ; IMIDAZOLE |

#### REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

#### REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations ≥ 0.1 % or SCL: 2-Methoxyethanol (EC 203-713-7, CAS 109-86-4)

#### PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

#### POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

#### Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)
Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 2024/590 on substances that deplete the ozone layer)

#### Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

#### Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

#### Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### National regulations

#### Austria

Ordinance on Flammable Liquids (VbF) : Hazard category 3: Flammable (flash point 23 - 60 °C. Excluding gas oils and petroleum).

#### Denmark

Class for fire hazard : Class II-1
Store unit : 5 liter
Classification remarks : R10 <H226;H302+H312+H332;H314;H360FD;H372>; Emergency management guidelines for the storage of flammable liquids must be followed

Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with it.
If an employee is pregnant or breastfeeding and the person in question uses or is exposed to this product at work, the employer must always carry out a risk assessment of the work. The assessment must both deal with the dangerousness of the impact and its strength and duration. The employer's decision that a pregnant or lactating woman can perform a specific work task must therefore be made in the context of her specific working conditions. See also WEA-Guideline A.1.8-7 on the working environment of pregnant and breastfeeding workers.
The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal
Listed or contains substance(s) on the Denmark - Indicative list of organic solvents present in Annex 3.4.1 of the WEA Guidance C.0.1-1: Methyl glycol (109-86-4)

### France

| Occupational diseases | |
|---|---|
| Code | Description |
| RG 84 | Conditions caused by liquid organic solvents for professional use: saturated or unsaturated aliphatic or cyclic liquid hydrocarbons and mixtures thereof; liquid halogenated hydrocarbons; nitrated derivatives of aliphatic hydrocarbons; alcohols; glycols, glycol ethers; ketones; aldehydes; aliphatic and cyclic ethers, including tetrahydrofuran; esters; dimethylformamide and dimethylacetamine; acetonitrile and propionitrile; pyridine; dimethylsulfone and dimethylsulfoxide |

### Germany

Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG).
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG).
Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1).
Chemicals Prohibition Ordinance (ChemVerbotsV) : This product is subject to ChemVerbotsV Annex 2 Entry 1. The following requirements must be observed: authorization requirement (according to § 6 paragraph 1 sentence 1), basic requirements for carrying out the delivery (according to § 8 paragraph 1, 3 and 4), identification and documentation (according to § 9 paragraph 1 to 3) and exclusion of the shipping route (according to § 10).
Major Accidents Ordinance (12. BImSchV) : Is listed in the Major Accidents Ordinance (12. BImSchV)

| Major Accidents Ordinance (12. BImSchV) | | | | |
|---|---|---|---|---|
| Number | Code | Title | Lower-tier | Upper-tier |
| 1.2.5.1 | P5a | Flammable liquids. Flammable liquids of category 1; flammable liquids of category 2 or 3 maintained at a temperature above their boiling point; other liquids with a flash point of ≤ 60 °C maintained at a temperature above their boiling point | 10,000 kg | 50,000 kg |
| 1.2.5.2 | P5b | Flammable liquids. Flammable liquids of category 2 or 3, where special processing conditions such as high pressure or high temperature can lead to the risk of accidents; other liquids with a flash point of ≤ 60 °C, where special processing conditions such as high pressure or high temperature can lead to the risk of accidents | 50,000 kg | 200,000 kg |
| 1.2.5.3 | P5c | Flammable liquids of categories 2 or 3, not covered under P5a and P5b | 5,000,000 kg | 50,000,000 kg |

### Netherlands

SZW List of Carcinogenic Substances : None of the components are listed
SZW List of Mutagenic Substances : None of the components are listed
SZW List of Reprotoxic Substances – Breastfeeding : None of the components are listed
SZW List of Reprotoxic Substances – Fertility : 2-METHOXYETHANOL is listed
SZW List of Reprotoxic Substances – Development : 2-METHOXYETHANOL,IMIDAZOLE are listed

### Poland

Polish National Regulations : Act of 25 February 2011 on chemical substances and their mixtures (J. o L. No. 63, item 322 as amended; consolidated text J. o L. 2019, item 1225).
Act of 14 December 2012 on waste (J. o L. 2013, item 322 as amended; consolidated text J. o L. 2020, item 797).
The announcement of Marshal of the Sejm of the Republic of Poland dated 19 October 2016 concerning the consolidated text announcement of the decree on the management of packaging and packaging waste (J. o L. 2016, item 1863 as amended).
Decree of the Minister of Environment of 14 December 2014 on the catalogue of waste (J. o L. 2014, item 1923).
Act of 19 August 2011 on the Carriage of Dangerous Goods (J. o L. 2011 No. 227, item 1367 as amended; consolidated text J. o L. 2020, item 154).
Regulation of the Minister of Family, Labour and Social Policy of 12 June 2018 on the highest permissible concentration and intensity of noxious agents for health at work environment (J. o L. item 1286 as amended).
The announcement of Minister of Health dated 9 September 2016 concerning the consolidated text announcement of the decree of the Minister of Health of 30 December 2004 on health and safety at work related to exposure to chemical agents at work (J. o L. of 16 September 2016, item 1488)
Regulation of the Minister of Health of 2 February 2011 on tests and measurements of the noxious agents for health at work environment (J. o L. No. 33, item 166 as amended).
Regulation of the Minister of Environment of 9 December 2003 on particularly hazardous substances to the environment (J. o L. No. 217, item 2141).
ADR Agreement: Government Statement of 13 March 2023 on the entry into force of amendments to Annexes A and B to the Agreement concerning the International Carriage of Dangerous Goods by Road (ADR), signed in Geneva on 30 September 1957 (J. o. L. 2023, item 891)
Regulation of the Minister of Health of 25 August 2015 on the method of marking places, pipelines, and containers and tanks used for storing or containing hazardous substances or hazardous mixtures (J.o.L. 2015, item 1368 as amended)

### Spain

Royal Decree 665/1997 : Is not subject to the Royal Decree 665/1997

### Switzerland

Chemicals Ordinance (ChemO, SR 813.11) : Group 2

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

| Abbreviations and acronyms: | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| BCF | Bioconcentration factor |
| BLV | Biological limit value |
| BOD | Biochemical oxygen demand (BOD) |
| CAS-No. | Chemical Abstracts Service number |
| CLP | Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 |
| COD | Chemical oxygen demand (COD) |
| CSA | Chemical safety assessment |

| Abbreviations and acronyms: | |
|---|---|
| DMEL | Derived Minimal Effect level |
| DNEL | Derived-No Effect Level |
| EC-No. | European Community number |
| EC50 | Median effective concentration |
| ED | Endocrine disruptor |
| EN | European Standard |
| EWC | European waste catalogue |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods |
| LC50 | Median lethal concentration |
| LD50 | Median lethal dose |
| LOAEL | Lowest Observed Adverse Effect Level |
| Log Kow | Partition coefficient n-octanol/water (Log Kow) |
| Log Pow | Partition coefficient n-octanol/water (Log Pow) |
| MAK | maximum workplace concentration |
| NOAEC | No-Observed Adverse Effect Concentration |
| NOAEL | No-Observed Adverse Effect Level |
| NOEC | No-Observed Effect Concentration |
| N.O.S. | Not Otherwise Specified |
| OECD | Organisation for Economic Co-operation and Development |
| OEL | Occupational Exposure Limit |
| OSHA | Occupational Safety & Health Administration |
| PBT | Persistent Bioaccumulative Toxic |
| PNEC | Predicted No-Effect Concentration |
| PPE | Personal protection equipment |
| RID | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS | Safety Data Sheet |
| STP | Sewage treatment plant |
| TF | Technical function |
| ThOD | Theoretical oxygen demand (ThOD) |
| TLM | Median Tolerance Limit |
| TWA | Time Weighted Average |
| VOC | Volatile Organic Compounds |
| vPvB | Very Persistent and Very Bioaccumulative |
| UFI | Unique Formula Identifier |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |

| Full text of H- and EUH-statements: | |
|---|---|
| Acute Tox. 4 (Inhalation) | Acute toxicity (inhal.), Category 4 |
| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment – Acute Hazard, Category 1 |
| Flam. Liq. 3 | Flammable liquids, Category 3 |
| Repr. 1B | Reproductive toxicity, Category 1B |
| Skin Corr. 1C | Skin corrosion/irritation, Category 1, Sub-Category 1C |
| H226 | Flammable liquid and vapour. |
| H302 | Harmful if swallowed. |
| H312 | Harmful in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H332 | Harmful if inhaled. |
| H360D | May damage the unborn child. |
| H360FD | May damage fertility. May damage the unborn child. |
| H372 | Causes damage to organs through prolonged or repeated exposure. |
| H400 | Very toxic to aquatic life. |

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.