

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

#### 1.1. Product identifier

|                |                       |
|----------------|-----------------------|
| Product form   | : Substance           |
| Substance name | : Isobutanol          |
| Chemical name  | : 2-methylpropan-1-ol |
| EC Index-No.   | : 603-108-00-1        |
| EC Number      | : 201-148-0           |
| CAS Number     | : 78-83-1             |
| Formula        | : C4H10O              |

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

##### Relevant identified uses

|                              |                  |
|------------------------------|------------------|
| Main use category            | : Industrial use |
| Use of the substance/mixture | : Paint industry |

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

##### Supplier

Aktaş Dış Ticaret A.Ş.  
Kısıklı Mahalesi Incir Sokak No: 6/2 6/2  
34692 İstanbul  
Türkiye  
T 0216 524 12 12, F 0216 524 12 13  
[info@aktasdis.com](mailto:info@aktasdis.com), [www.aktasdis.com](http://www.aktasdis.com)

#### 1.4. Emergency telephone number

|                  |                  |
|------------------|------------------|
| Emergency number | : 0216 524 12 12 |
|------------------|------------------|

### 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 |
| Skin corrosion/irritation, Category 2                         | H315 |
| Serious eye damage/eye irritation, Category 1                 | H318 |
| Specific target organ toxicity – Single exposure, Category 3, | H335 |
| Respiratory tract irritation                                  |      |
| Specific target organ toxicity – Single exposure, Category 3, | H336 |
| Narcosis  |      |
| Full text of H- and EUH-statements: see section 16            |      |

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

Flammable liquid and vapour. May cause drowsiness or dizziness. May cause respiratory irritation. Causes skin irritation. Causes serious eye damage.

#### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) : H226 - Flammable liquid and vapour.

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|                                |  |
|--------------------------------|--|
| Precautionary statements (CLP) | : H335 - May cause respiratory irritation.<br>H315 - Causes skin irritation.<br>H318 - Causes serious eye damage.<br>H336 - May cause drowsiness or dizziness.<br>P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.<br>No smoking.<br>P233 - Keep container tightly closed.<br>P240 - Ground and bond container and receiving equipment.<br>P241 - Use explosion-proof electrical/ventilating/lighting equipment.<br>P261 - Avoid breathing dust/fume/gas/mist/vapours/spray.<br>P264 - Wash hands, forearms and face thoroughly after handling. |
| Extra phrases                  | : For professional users only.   |

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Substance type : Mono-constituent

| Name       | Product identifier  | %    | Classification according to Regulation (EC) No. 1272/2008 [CLP]                                     |
|------------|---|------|---|
| Isobutanol | CAS Number: 78-83-1<br>EC Number: 201-148-0<br>EC Index-No.: 603-108-00-1 | ≥ 99 | Flam. Liq. 3, H226<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>STOT SE 3, H336 |

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 poison center or a doctor if you feel unwell.   |
| 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. If skin irritation occurs: Get medical advice/attention.             |
| 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    | : Call a poison center or a doctor if you feel unwell.   |

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

|                                     |                                      |
|-------------------------------------|--------------------------------------|
| Symptoms/effects                    | : May cause drowsiness or dizziness. |
| Symptoms/effects after inhalation   | : May cause respiratory irritation.  |
| Symptoms/effects after skin contact | : Irritation.                        |
| Symptoms/effects after eye contact  | : Serious damage to eyes.            |
| Symptoms/effects after ingestion    | : None under normal conditions.      |

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

Treat symptomatically.

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### 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 : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

##### 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.

#### 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. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with skin and eyes.

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Hygiene measures : 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 : Store always product in container of same material as original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### DNEL and PNEC

| Isobutanol (78-83-1)                  |                       |
|---------------------------------------|-----------------------|
| <b>DNEL/DMEL (Workers)</b>            |                       |
| Long-term - local effects, inhalation | 310 mg/m <sup>3</sup> |
| <b>DNEL/DMEL (General population)</b> |                       |
| Long-term - local effects, inhalation | 55 mg/m <sup>3</sup>  |
| <b>PNEC (Water)</b>                   |                       |
| PNEC aqua (freshwater)                | 0.4 mg/l              |
| PNEC aqua (marine water)              | 0.04 mg/l             |
| PNEC aqua (intermittent, freshwater)  | 11 mg/l               |
| <b>PNEC (Sediment)</b>                |                       |
| PNEC sediment (freshwater)            | 1.52 mg/kg dwt        |
| PNEC sediment (marine water)          | 0.152 mg/kg dwt       |
| <b>PNEC (Soil)</b>                    |                       |
| PNEC soil                             | 0.0699 mg/kg dwt      |
| <b>PNEC (STP)</b>                     |                       |
| PNEC sewage treatment plant           | 10 mg/l               |

### 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:

Safety glasses

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### Skin protection

#### Skin and body protection:

Wear suitable protective clothing

#### Hand protection:

Protective gloves

### Respiratory protection

#### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

### 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  | : According to product specification.                                 |
| Odour   | : characteristic.   |
| Odour threshold                                 | : Not available   |
| Melting point                                   | : Not applicable  |
| Freezing point                                  | : Not available   |
| Boiling point                                   | : 108 °C Atm. press.: 1013 hPa  |
| Flammability                                    | : Flammable liquid and vapour.  |
| Lower explosion limit                           | : Not available   |
| Upper explosion limit                           | : Not available   |
| Flash point                                     | : 31 °C Atm. press.: 1013 hPa   |
| Auto-ignition temperature                       | : Not available   |
| Decomposition temperature                       | : Not available   |
| pH  | : Not available   |
| Viscosity, kinematic                            | : 3.87 mm <sup>2</sup> /s   |
| Viscosity, dynamic                              | : 3.103 mPa·s Temp.: '20°C' Parameter: 'dynamic viscosity (in mPa s)' |
| Solubility                                      | : Not available   |
| Partition coefficient n-octanol/water (Log Kow) | : Not available   |
| Vapour pressure                                 | : < 16 hPa Temp.: 20 °C   |
| Vapour pressure at 50°C                         | : Not available   |
| Density   | : 801.7 kg/m <sup>3</sup> Type: 'density' Temp.: 20 °C                |
| 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.

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### 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)             | : Not classified   |
| Acute toxicity (dermal)           | : Not classified   |
| Acute toxicity (inhalation)       | : Not classified   |
| Skin corrosion/irritation         | : Causes skin irritation.  |
| Serious eye damage/irritation     | : Causes serious eye damage.   |
| Respiratory or skin sensitisation | : Not classified   |
| Germ cell mutagenicity            | : Not classified   |
| Carcinogenicity                   | : Not classified   |
| Reproductive toxicity             | : Not classified   |
| STOT-single exposure              | : May cause respiratory irritation. May cause drowsiness or dizziness. |
| STOT-repeated exposure            | : Not classified   |

#### Isobutanol (78-83-1)

|                            |  |
|----------------------------|--|
| NOAEL (oral, rat, 90 days) | > 1450 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) |
|----------------------------|--|

Aspiration hazard : Not classified

#### Isobutanol (78-83-1)

|                      |                         |
|----------------------|-------------------------|
| Viscosity, kinematic | 3.87 mm <sup>2</sup> /s |
|----------------------|-------------------------|

### 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

|   |   |
|---|---|
| Ecology - general   | : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment. |
| Hazardous to the aquatic environment, short-term (acute)  | : Not classified  |
| Hazardous to the aquatic environment, long-term (chronic) | : Not classified  |

#### Isobutanol (78-83-1)

|                      |  |
|----------------------|--|
| LC50 - Fish [1]      | 1430 mg/l Test organisms (species): Pimephales promelas          |
| EC50 - Crustacea [1] | 1100 mg/l Test organisms (species): Daphnia pulex                |
| NOEC (chronic)       | 20 mg/l Test organisms (species): Daphnia magna Duration: '21 d' |

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### 12.2. Persistence and degradability

#### Isobutanol (78-83-1)

|                               |                        |
|-------------------------------|------------------------|
| Persistence and degradability | Not rapidly degradable |
|-------------------------------|------------------------|

### 12.3. Bioaccumulative potential

No additional information available

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 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.   |
| HP Code                                    | : HP3 - "Flammable:"<br>– flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C;<br>– flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air;<br>– flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction;<br>– flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa;<br>– water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities;<br>– other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste.<br>HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.<br>HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye. |

## SECTION 14: Transport information






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

| ADR                                 | IMDG    | IATA    | ADN     | RID     |
|-------------------------------------|---------|---------|---------|---------|
| <b>14.1. UN number or ID number</b> |         |         |         |         |
| UN 1212                             | UN 1212 | UN 1212 | UN 1212 | UN 1212 |

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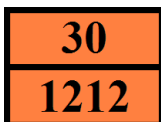
according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

| ADR   | IMDG  | IATA  | ADN   | RID   |
|---|---|---|---|---|
| <b>14.2. UN proper shipping name</b>  |   |   |   |   |
| ISOBUTANOL (ISOBUTYL ALCOHOL)   | ISOBUTANOL (ISOBUTYL ALCOHOL)   | Isobutyl alcohol  | ISOBUTANOL (ISOBUTYL ALCOHOL)   | ISOBUTANOL (ISOBUTYL ALCOHOL)   |
| <b>Transport document description</b>   |   |   |   |   |
| UN 1212 ISOBUTANOL (ISOBUTYL ALCOHOL), 3, III, (D/E)                              | UN 1212 ISOBUTANOL (ISOBUTYL ALCOHOL), 3, III (28°C c.c.)   | UN 1212 Isobutyl alcohol, 3, III  | UN 1212 ISOBUTANOL (ISOBUTYL ALCOHOL), 3, III                                       | UN 1212 ISOBUTANOL (ISOBUTYL ALCOHOL), 3, III                                       |
| <b>14.3. Transport hazard class(es)</b>   |   |   |   |   |
| 3   | 3   | 3   | 3   | 3   |
|  |                            |  |  |  |
| <b>14.4. Packing group</b>  |   |   |   |   |
| III   | III   | III   | III   | III   |
| <b>14.5. Environmental hazards</b>  |   |   |   |   |
| Dangerous for the environment: No   | Dangerous for the environment: No<br>Marine pollutant: No<br>EmS-No. (Fire): F-E<br>EmS-No. (Spillage): S-D | Dangerous for the environment: No   | Dangerous for the environment: No   | Dangerous for the environment: No   |
| No supplementary information available  |   |   |   |   |

### 14.6. Special precautions for user

#### Overland transport

|   |                           |
|---|---------------------------|
| Classification code (ADR)                                 | : F1                      |
| Limited quantities (ADR)                                  | : 5I                      |
| 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

#### 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          |

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Flash point (IMDG) : 28°C c.c.  
Properties and observations (IMDG) : Colourless liquid with a sweet odour. Flashpoint: 28°C c.c. Explosive limits: 1.2% to 10.9%. Partially 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)                                   | Isobutanol    |
| 3(b)                                   | Isobutanol    |
| 40.                                    | Isobutanol    |

##### REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

##### REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

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### PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

### POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

### Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

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

Not listed on the COUNCIL REGULATION (EC) of dual-use items.

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

Not listed on the Explosives Precursors list (EU)

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

Not listed on the Drug Precursors list (EU)

### National regulations

#### 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 1, Slightly hazardous to water (Classification according to AwSV; ID No. 131).

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

### Abbreviations and acronyms:

|           |   |
|-----------|---|
| 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)   |
| COD       | Chemical oxygen demand (COD)  |
| DMEL      | Derived Minimal Effect level  |
| DNEL      | Derived-No Effect Level   |
| EC Number | European Community number   |
| EC50      | Median effective concentration  |
| EN        | European Standard   |
| 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  |
| NOAEC     | No-Observed Adverse Effect Concentration  |

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| Abbreviations and acronyms: |  |
|-----------------------------|--|
| NOAEL                       | No-Observed Adverse Effect Level   |
| NOEC                        | No-Observed Effect Concentration   |
| OECD                        | Organisation for Economic Co-operation and Development                       |
| OEL                         | Occupational Exposure Limit  |
| PBT                         | Persistent Bioaccumulative Toxic   |
| PNEC                        | Predicted No-Effect Concentration  |
| RID                         | Regulations concerning the International Carriage of Dangerous Goods by Rail |
| SDS                         | Safety Data Sheet  |
| STP                         | Sewage treatment plant   |
| ThOD                        | Theoretical oxygen demand (ThOD)   |
| TLM                         | Median Tolerance Limit   |
| VOC                         | Volatile Organic Compounds   |
| CAS Number                  | Chemical Abstract Service number   |
| N.O.S.                      | Not Otherwise Specified  |
| vPvB                        | Very Persistent and Very Bioaccumulative                                     |
| ED                          | Endocrine disruptor  |

| Full text of H- and EUH-statements: |  |
|-------------------------------------|--|
| Eye Dam. 1                          | Serious eye damage/eye irritation, Category 1  |
| Flam. Liq. 3                        | Flammable liquids, Category 3  |
| Skin Irrit. 2                       | Skin corrosion/irritation, Category 2  |
| STOT SE 3                           | Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation |
| H226                                | Flammable liquid and vapour.   |
| H315                                | Causes skin irritation.  |
| H318                                | Causes serious eye damage.   |
| H335                                | May cause respiratory irritation.  |
| H336                                | May cause drowsiness or dizziness.   |

The classification complies with : ATP 12

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.