

## SAFETY DATA SHEET

## Aka-Cool

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

## 1.1. Product identifier

## Trade name

Aka-Cool

## Product no.

19201015, 19201017 (9610, 9620, 9630, 9640)

## ▼ Unique formula identifier (UFI)

DMD7-KHUM-K94X-8KXH

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

## Relevant identified uses of the substance or mixture

Cooling liquid additive for improving cutting and preventing corrosion on metallographic cutters

## Uses advised against

No special

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

## Company and address

**Akasel A/S**

Svogerslev Hovedgade 48

4000 Roskilde

Denmark

+45 57 84 05 01

www.akasel.com

## E-mail

safety@akasel.com

## SDS date

21-09-2021

## SDS Version

2.0

## Date of previous version

2020-04-06 (1.0)

## 1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service).

See section 4 "First aid measures".

## SECTION 2: Hazards identification

## 2.1. Classification of the substance or mixture

Acute Tox. 4; H302, Harmful if swallowed.

Skin Irrit. 2; H315, Causes skin irritation.

Eye Irrit. 2; H319, Causes serious eye irritation.

Aquatic Chronic 3; H412, Harmful to aquatic life with long lasting effects.

## 2.2. Label elements

Hazard pictogram(s)



**Signal word**

Warning

▼ **Hazard statement(s)**

- Harmful if swallowed. (H302)
- Causes skin irritation. (H315)
- Causes serious eye irritation. (H319)
- Harmful to aquatic life with long lasting effects. (H412)

**Safety statement(s)**

**General**

-

▼ **Prevention**

- Wash hands thoroughly after handling. (P264)
- Avoid release to the environment. (P273)
- Wear eye protection / protective gloves / protective clothing. (P280)

▼ **Response**

- IF SWALLOWED: Call a POISON CENTER / doctor if you feel unwell. (P301+P312)
- Rinse mouth. (P330)

**Storage**

-

▼ **Disposal**

- Dispose of contents/container to an approved waste disposal plant. (P501)

**Hazardous substances**

- 2-phenoxyethanol
- Distillates (petroleum), hydrotreated heavy naphthenic
- 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate

**2.3. Other hazards**

**Additional labelling**

EUH208, Contains 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate . May produce an allergic reaction.

**Additional warnings**

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

**SECTION 3: Composition/information on ingredients**

▼ **3.2 Mixtures**

| Product/substance                                      | Identifiers   | % w/w      | Classification  | Note |
|--|---|------------|---|------|
| 2-phenoxyethanol                                       | CAS No.: 122-99-6<br>EC No.: 204-589-7<br>REACH:<br>Index No.: 603-098-00-9 | 10 - < 25% | Acute Tox. 4, H302<br>Eye Irrit. 2, H319  |      |
| Distillates (petroleum), hydrotreated heavy naphthenic | CAS No.: 64742-52-5<br>EC No.: 265-155-0<br>REACH: 01-2119467170-45-xxxx    | 1 - < 10%  | Acute Tox. 4, H302<br>Asp. Tox. 1, H304<br>Acute Tox. 4, H312<br>Acute Tox. 4, H332 |      |

| Index No.: 649-465-00-7  |  |              |  |
|--|--|--------------|--|
| Alcohols, C16-18 and C18-unsatd, ethoxylated                           | CAS No.: 68920-66-1<br>EC No.: 500-236-9<br>REACH: 01-2119849407-26-xxxx<br>Index No.: | 2,5 - < 10%  | Skin Irrit. 2, H315<br>Aquatic Chronic 2, H411   |
| Benzenesulfonic acid, mono-C15-36-branched alkyl derivs., sodium salts | CAS No.: 90218-04-5<br>EC No.: 290-676-5<br>REACH:<br>Index No.:                       | 1 - < 10%    | Aquatic Chronic 4, H413  |
| Alcohol ethoxylates  | CAS No.: 68920-66-1<br>EC No.: 500-236-9<br>REACH:<br>Index No.:                       | 2,5 - < 10%  | Skin Irrit. 2, H315<br>Aquatic Acute 1, H400 (M=1)<br>Aquatic Chronic 3, H412  |
| Alkyl polyglycol ether carbonic acid,2 EO                              | CAS No.: 57635-48-0<br>EC No.: 611-563-2<br>REACH:<br>Index No.:                       | 2,5 - < 3%   | Eye Dam. 1, H318<br>Aquatic Chronic 2, H411  |
| 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate   | CAS No.: 55406-53-6<br>EC No.: 259-627-5<br>REACH:<br>Index No.: 616-212-00-7          | 0,1 - < 2,5% | Acute Tox. 4, H302<br>Skin Sens. 1, H317<br>Eye Dam. 1, H318<br>Acute Tox. 3, H331<br>STOT RE 1, H372<br>Aquatic Acute 1, H400 (M=10)<br>Aquatic Chronic 1, H410 (M=1) |

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See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

No special

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### ▼ Skin contact

IF ON SKIN: Wash with plenty of water and soap.

Remove contaminated clothing and shoes. Ensure to wash exposed skin thoroughly with water and soap. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eye contact

Upon irritation of the eye: Remove contact lenses. Flush eyes immediately with plenty of water or isotonic water (20-30°C) for at least 5 minutes and continue until irritation stops. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

In the case of ingestion, contact a doctor immediately. If the person is conscious, give them water. DO NOT try to induce vomiting, unless this is recommended by a doctor. Hold head facing down to prevent vomit returning mouth and throat. Prevent shock by keeping the injured person warm and calm. Initiate immediate resuscitation if breathing stops. If unconscious, roll the injured person into recovery position. Call an ambulance.

#### Burns

Not applicable

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

This product contains substances that may trigger an allergic reaction to predisposed persons.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

If eye irritation persists: Get medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Firefighting measures

#### ▼ 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>).

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### SECTION 6: Accidental release measures

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

Avoid direct contact with spilled substances.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

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

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

Use sand, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations.

To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

#### ▼ 6.4. Reference to other sections

See section 13 on "Disposal considerations" in regard of handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### ▼ 7.1. Precautions for safe handling

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

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

To be protected from direct sunlight, do not expose to heat.

Zinc is unsuitable as material for containers / equipment

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

#### ▼ Recommended storage material

Always store in containers of the same material as the original container.

#### ▼ Storage temperature

5 - 40°C

#### ▼ Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

No substances are listed in the national list of substances with an occupational exposure limit.

#### DNEL

No data available

#### PNEC

No data available

### ▼ 8.2. Exposure controls

Control is unnecessary if the product is used as intended.

#### ▼ General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

#### Exposure scenarios

There are no exposure scenarios implemented for this product.

#### Exposure limits

Occupational exposure limits have not been defined for the substances in this product.

#### ▼ Appropriate technical measures

Apply standard precautions during use of the product. Avoid inhalation of vapours.

#### ▼ Hygiene measures

Take off contaminated clothing and wash it before reuse.

#### Measures to avoid environmental exposure

No specific requirements

### Individual protection measures, such as personal protective equipment

#### Generally


Use only CE marked protective equipment.

#### ▼ Respiratory Equipment


| Work situation               | Type                    | Class   | Colour      | Standards |
|------------------------------|-------------------------|---------|-------------|-----------|
| In properly ventilated areas | Combination filter A2P2 | Class 2 | Brown/White | EN14387   |




▼ Skin protection

| Recommended  | Type/Category | Standards |   |
|--|---------------|-----------|---|
| Dedicated work clothing should be worn. Wear a protective suit in the event of prolonged periods of work with the product. | -             | -         |  |

▼ Hand protection

| Material | Glove thickness (mm) | Breakthrough time (min.) | Standards               |   |
|----------|----------------------|--------------------------|-------------------------|---|
| Nitrile  | 0.4                  | > 240                    | EN374-2, EN374-3, EN388 |  |

▼ Eye protection

| Type                                   | Standards |  |
|--|-----------|--|
| Wear safety glasses with side shields. | EN166     |  |

## SECTION 9: Physical and chemical properties

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

Form

Liquid

Colour

Brown

Odour

Gasoline-like

Odour threshold (ppm)

Testing not relevant or not possible due to nature of the product.

pH

9,1

Density (g/cm<sup>3</sup>)

0.96 (20.00 °C)

Viscosity

100.00 mm<sup>2</sup>/s (20.00 °C)

Phase changes

Melting point (°C)

Testing not relevant or not possible due to nature of the product.

Boiling point (°C)

Testing not relevant or not possible due to nature of the product.

Vapour pressure

Testing not relevant or not possible due to nature of the product.

Vapour density

Testing not relevant or not possible due to nature of the product.

Decomposition temperature (°C)

Testing not relevant or not possible due to nature of the product.

▼ Evaporation rate (n-butylacetate = 100)

Data on fire and explosion hazards

Flash point (°C)

120.00 °C

Ignition (°C)

Testing not relevant or not possible due to nature of the product.

Auto flammability (°C)

Testing not relevant or not possible due to nature of the product.

Explosion limits (% v/v)

Testing not relevant or not possible due to nature of the product.

Explosive properties

Testing not relevant or not possible due to nature of the product.

Oxidizing properties

Testing not relevant or not possible due to nature of the product.

Solubility

Solubility in water

Soluble

n-octanol/water coefficient

Testing not relevant or not possible due to nature of the product.

Solubility in fat (g/L)

Testing not relevant or not possible due to nature of the product.

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available

▼ 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

▼ Acute toxicity

|                   |                  |
|-------------------|------------------|
| Product/substance | 2-phenoxyethanol |
| Test method       |                  |
| Species           | Rat              |
| Route of exposure | Oral             |
| Test              | LD50             |
| Result            | 1260-4000 mg/kg  |
| Other information |                  |

|                   |                  |
|-------------------|------------------|
| Product/substance | 2-phenoxyethanol |
| Test method       |                  |
| Species           | Rabbit           |
| Route of exposure | Dermal           |
| Test              | LD50             |

Result 2000 mg/kg

Other information

Product/substance 2-phenoxyethanol

Test method

Species Rat

Route of exposure Inhalation

Test LC50 (4 hours)

Result >5 mg/L

Other information

Product/substance Distillates (petroleum), hydrotreated heavy naphthenic

Test method

Species Rat

Route of exposure Inhalation

Test LC50 (4 hours)

Result 2,18 mg/L

Other information

Product/substance Distillates (petroleum), hydrotreated heavy naphthenic

Test method

Species Rabbit

Route of exposure Dermal

Test LC50

Result >2000 mg/kg

Other information

Product/substance Distillates (petroleum), hydrotreated heavy naphthenic

Test method

Species Rat

Route of exposure Oral

Test LD50

Result >5000 mg/kg

Other information

Product/substance Alcohols, C16-18 and C18-unsatd, ethoxylated

Test method

Species Rabbit

Route of exposure Dermal

Test LD50

Result >2000 mg/kg

Other information

Product/substance Alcohols, C16-18 and C18-unsatd, ethoxylated

Test method

Species Rat

Route of exposure Oral

Test LD50

Result >2000 mg/kg

Other information

Product/substance Alkohol ethoxylates



Test method  
 Species Rat  
 Route of exposure Oral  
 Test LD50  
 Result 2000 mg/kg  
 Other information

Product/substance Alkyl polyglycol ether carbonic acid,2 EO  
 Test method  
 Species Rat  
 Route of exposure Oral  
 Test LD50  
 Result >2000 mg/kg  
 Other information

Product/substance 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate  
 Test method  
 Species Rat  
 Route of exposure Inhalation  
 Test LC50 (4 hours)  
 Result 0,763 mg/m<sup>3</sup>  
 Other information

Product/substance 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate  
 Test method  
 Species Rabbit  
 Route of exposure Dermal  
 Test LD50  
 Result >2000 mg/kg  
 Other information

Product/substance 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate  
 Test method  
 Species Rat  
 Route of exposure Oral  
 Test LD50  
 Result 1470 mg/kg  
 Other information

Harmful if swallowed.

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/irritation**

Causes serious eye irritation.

**▼ Respiratory sensitisation**

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

**▼ Skin sensitisation**

This product contains substances that may trigger an allergic reaction to predisposed persons.

**Germ cell mutagenicity**

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

**Carcinogenicity**

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

**Reproductive toxicity**

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

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**Long term effects**

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

**Other information**

No special

**SECTION 12: Ecological information**

**▼ 12.1. Toxicity**

|                   |                  |
|-------------------|------------------|
| Product/substance | 2-phenoxyethanol |
| Test method       |                  |
| Species           | Algae            |
| Compartment       |                  |
| Duration          | 72 hours         |
| Test              | EC50             |
| Result            | 443 mg/L         |
| Other information |                  |

|                   |                  |
|-------------------|------------------|
| Product/substance | 2-phenoxyethanol |
| Test method       |                  |
| Species           | Daphnia          |
| Compartment       |                  |
| Duration          | 48 hours         |
| Test              | EC50             |
| Result            | 460 mg/L         |
| Other information |                  |

|                   |                  |
|-------------------|------------------|
| Product/substance | 2-phenoxyethanol |
| Test method       |                  |
| Species           | Daphnia          |
| Compartment       |                  |
| Duration          | 24 hours         |
| Test              | EC50             |
| Result            | 517 mg/L         |
| Other information |                  |

|                   |  |
|-------------------|--|
| Product/substance | Distillates (petroleum), hydrotreated heavy naphthenic |
| Test method       |  |
| Species           | Daphnia  |
| Compartment       |  |
| Duration          | 48 hours   |
| Test              | EL50   |
| Result            | >1000 mg/L   |
| Other information |  |

|                   |  |
|-------------------|--|
| Product/substance | Alcohols, C16-18 and C18-unsatd, ethoxylated |
|-------------------|--|

Test method  
 Species Algae  
 Compartment  
 Duration 72 hours  
 Test EC50  
 Result >100 mg/L  
 Other information

Product/substance Alcohols, C16-18 and C18-unsatd, ethoxylated  
 Test method  
 Species Daphnia Magna  
 Compartment  
 Duration 48 hours  
 Test EL50  
 Result 51 mg/L  
 Other information

Product/substance Alkyl polyglycol ether carbonic acid,2 EO  
 Test method  
 Species Pseudokirchneriella subcapitata  
 Compartment  
 Duration No data available.  
 Test ErC50  
 Result 5,2 mg/L  
 Other information

Product/substance Alkyl polyglycol ether carbonic acid,2 EO  
 Test method  
 Species Daphnia Magna  
 Compartment  
 Duration No data available.  
 Test EC50  
 Result 1,6 mg/L  
 Other information

Product/substance 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate  
 Test method  
 Species Algae  
 Compartment  
 Duration 72 hours  
 Test EC50  
 Result 0,022 - 0,026 mg/L  
 Other information

Product/substance 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate  
 Test method  
 Species Daphnia  
 Compartment  
 Duration 48 hours  
 Test EC50  
 Result 0,16 mg/L  
 Other information

|                   |  |
|-------------------|--|
| Product/substance | 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate |
| Test method       |  |
| Species           | Algae  |
| Compartment       |  |
| Duration          | 72 hours   |
| Test              | EC0  |
| Result            | 0,01 mg/L  |
| Other information |  |

|                   |  |
|-------------------|--|
| Product/substance | 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate |
| Test method       |  |
| Species           | Daphnia  |
| Compartment       |  |
| Duration          | 48 hours   |
| Test              | EC0  |
| Result            | 0,11 mg/L  |
| Other information |  |

|                   |  |
|-------------------|--|
| Product/substance | 3-iodo-2-propynyl butylcarbamate 3-iodoprop-2-yn-1-yl butylcarbamate |
| Test method       |  |
| Species           | Algae  |
| Compartment       |  |
| Duration          | 48 hours   |
| Test              | EC50   |
| Result            | <1 mg/L  |
| Other information |  |

#### ▼ 12.2. Persistence and degradability

|                   |                  |
|-------------------|------------------|
| Product/substance | 2-phenoxyethanol |
| Biodegradable     | Yes              |
| Test method       |                  |
| Result            |                  |

#### ▼ 12.3. Bioaccumulative potential

|                           |                   |
|---------------------------|-------------------|
| Product/substance         | 2-phenoxyethanol  |
| Test method               |                   |
| Potential bioaccumulation | No data available |
| LogPow                    | 1,1600            |
| BCF                       | No data available |
| Other information         |                   |

#### 12.4. Mobility in soil

2-phenoxyethanol  
LogKoc = 0.997004, High mobility potential.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances considered to meet the criteria classifying them as PBT and/or vPvB.

#### 12.6. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

## SECTION 13: Disposal considerations

### ▼ 13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

HP 4 - Irritant (skin irritation and eye damage)

HP 6 - Acute toxicity

Avoid discharge to lakes, streams, sewers, etc.

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

### EWC code

12 01 09\* Machining emulsions and solutions free of halogens

13 02 05\* Mineral-based non-chlorinated engine, gear and lubricating oils

15 01 10\* Packaging containing residues of or contaminated by dangerous substances

### Specific labelling

Not applicable

### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

## SECTION 14: Transport information

### 14.1 - 14.4

Not dangerous goods according to ADR, IATA and IMDG.

### ADR/RID

Not applicable

### ▼IMDG

Not applicable

"MARINE POLLUTANT"

No

### ▼IATA

Not applicable

### 14.5. Environmental hazards

Not applicable

### 14.6. Special precautions for user

Not applicable

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

No data available

## SECTION 15: Regulatory information

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

#### ▼ Restrictions for application

Restricted to professional users.

#### Demands for specific education

No specific requirements

#### ▼SEVESO - Categories / dangerous substances

Not applicable

#### Additional information

Not applicable

#### Sources

Regulation (EU) No 1357/2014 of 18 December 2014 on waste.

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (CLP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

- H302, Harmful if swallowed.
- H304, May be fatal if swallowed and enters airways.
- H312, Harmful in contact with skin.
- H315, Causes skin irritation.
- H317, May cause an allergic skin reaction.
- H318, Causes serious eye damage.
- H319, Causes serious eye irritation.
- H331, Toxic if inhaled.
- H332, Harmful if inhaled.
- H372, Causes damage to organs through prolonged or repeated exposure.
- H400, Very toxic to aquatic life.
- H410, Very toxic to aquatic life with long lasting effects.
- H411, Toxic to aquatic life with long lasting effects.
- H412, Harmful to aquatic life with long lasting effects.
- H413, May cause long lasting harmful effects to aquatic life.

#### 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
- CE = Conformité Européenne
- 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
- IARC = International Agency for Research on Cancer (IARC)
- 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
- RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- RRN = REACH Registration Number
- SCL = A specific concentration limit.
- 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

#### Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)

#### The safety data sheet is validated by

[iro@akasel.com](mailto:iro@akasel.com)

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en