

version number V 1.0  
date of compilation 17.02.2020

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

### 1.1 product identifier

trade name  
CUTOL 2000 \*  
article number: 63168

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

relevant identified uses  
coolant  
PROFESSIONAL, INDUSTRIAL  
the product is not intended for consumer use

### 1.3 details of the supplier of the safety data sheet

KALTENBACH GMBH & CO. KG  
BLASIRING 4  
79539 LÖRRACH

|                           |                        |
|---------------------------|------------------------|
| Telephone                 | +49 - 7621 - 175 - 0   |
| telefax                   | +49 - 7621 - 175 - 490 |
| e-mail (competent person) | K.BRAUN@KALTENBACH.DE  |

### 1.4 emergency telephone number

only available during office hours: 08.00-16.00  
+49 - 7621 - 175 - 270

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)  
This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- Signal word not required
- Pictograms not required
- Supplemental hazard information

EUH208 Contains 3-iodo-2-propynyl butylcarbamate, 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH210 Safety data sheet available on request.

### 2.3 Other hazards

This product is a with biocidal products treated article

# Safety data sheet

according to Regulation (EC) No. 1907/2006 (REACH)



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| Name of substance                |
|----------------------------------|
| 3-iodo-2-propynyl butylcarbamate |
| 1,2-benzisothiazol-3(2H)-one     |

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture)

### 3.2 Mixtures

| Name of substance                                                                          | Identifier                                                                         | Wt%       | Classification acc. to GHS                       | Pictograms | Notes | Specific Conc. Limits | M-Factors |
|--------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------|--------------------------------------------------|------------|-------|-----------------------|-----------|
| 2-(2-butoxyethoxy)ethanol                                                                  | CAS No 112-34-5<br>EC No 203-961-6<br>REACH Reg. No 01-2119475104-44               | 1 – < 2.5 | Eye Irrit. 2 / H319                              |            | IOELV |                       |           |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | CAS No 85536-23-8 827613-35-4<br>EC No 932-164-2<br>REACH Reg. No 01-2119565130-50 | 1 – < 2.5 | Skin Irrit. 2 / H315<br>Aquatic Chronic 3 / H412 |            |       |                       |           |
| Sulfonic acids, petroleum, sodium salts                                                    | CAS No 68608-26-4<br>EC No 271-781-5<br>REACH Reg. No 01-2119527859-22             | 1 – < 2.5 | Eye Irrit. 2 / H319                              |            |       |                       |           |

#### Notes

IOELV: Substance with a community indicative occupational exposure limit value

For full text of abbreviations: see SECTION 16.

## SECTION 4: First aid measures

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#### **4.1 Description of first aid measures**

##### General notes

Remove victim out of the danger area. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

##### Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

##### Following skin contact

Wash with plenty of soap and water.

##### Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

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

Symptoms and effects are not known to date.

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

none

### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

Suitable extinguishing media

Fire extinguishing powder, Carbon dioxide (CO<sub>2</sub>), Sand

Unsuitable extinguishing media

Water jet

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

Hazardous combustion products

Nitrogen oxides (NO<sub>x</sub>)

#### **5.3 Advice for firefighters**

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

### **SECTION 6: Accidental release measures**

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

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

#### **6.2 Environmental precautions**

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

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

Advice on how to contain a spill

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Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

Never place chemicals in containers that are normally used for food or drink.

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

Control of effects

No special measures are necessary. No hazardous reaction when handled and stored according to provisions.

Protect against external exposure, such as

Heat, Frost

#### 7.3 Specific end use(s)

See section 16 for a general overview.

### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

| Occupational exposure limit values (Workplace Exposure Limits) |                           |          |            |           |             |            |              |                 |                   |          |            |
|----------------------------------------------------------------|---------------------------|----------|------------|-----------|-------------|------------|--------------|-----------------|-------------------|----------|------------|
| Country                                                        | Name of agent             | CAS No   | Identifier | TWA [ppm] | TWA [mg/m³] | STEL [ppm] | STEL [mg/m³] | Ceiling-C [ppm] | Ceiling-C [mg/m³] | Notation | Source     |
| EU                                                             | 2-(2-butoxyethoxy)ethanol | 112-34-5 | IOELV      | 10        | 67.5        | 15         | 101.2        |                 |                   |          | 2006/15/EC |
| GB                                                             | 2-(2-butoxyethoxy)ethanol | 112-34-5 | WEL        | 10        | 67.5        | 15         | 101.2        |                 |                   |          | EH40/2005  |

Notation

Ceiling-C  
STEL

ceiling value is a limit value above which exposure should not occur

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA

time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

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| Relevant DNELs of components of the mixture                                                |                           |          |                         |                                    |                              |                              |
|--------------------------------------------------------------------------------------------|---------------------------|----------|-------------------------|------------------------------------|------------------------------|------------------------------|
| Name of substance                                                                          | CAS No                    | Endpoint | Threshold level         | Protection goal, route of exposure | Used in                      | Exposure time                |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | DNEL     | 67.5 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry)            | chronic - systemic effects   |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | DNEL     | 67.5 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry)            | chronic - local effects      |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | DNEL     | 101.2 mg/m <sup>3</sup> | human, inhalatory                  | worker (industry)            | acute - local effects        |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | DNEL     | 83 mg/kg bw/day         | human, dermal                      | worker (industry)            | chronic - systemic effects   |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | DNEL     | 7.05 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry)            | chronic - systemic effects   |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | DNEL     | 2 mg/kg bw/day          | human, dermal                      | worker (industry)            | chronic - systemic effects   |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | DNEL     | 0.66 mg/m <sup>3</sup>  | human, inhalatory                  | worker (industry)            | chronic - systemic effects   |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | DNEL     | 3.33 mg/kg bw/day       | human, dermal                      | worker (industry)            | chronic - systemic effects   |
| Relevant PNECs of components of the mixture                                                |                           |          |                         |                                    |                              |                              |
| Name of substance                                                                          | CAS No                    | Endpoint | Threshold level         | Organism                           | Environmental compartment    | Exposure time                |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | PNEC     | 1.1 mg/l                | aquatic organisms                  | freshwater                   | short-term (single instance) |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | PNEC     | 0.11 mg/l               | aquatic organisms                  | marine water                 | short-term (single instance) |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | PNEC     | 200 mg/l                | aquatic organisms                  | sewage treatment plant (STP) | short-term (single instance) |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | PNEC     | 4.4 mg/kg               | aquatic organisms                  | freshwater sediment          | short-term (single instance) |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | PNEC     | 0.44 mg/kg              | aquatic organisms                  | marine sediment              | short-term (single instance) |
| 2-(2-butoxyethoxy)ethanol                                                                  | 112-34-5                  | PNEC     | 0.32 mg/kg              | terrestrial organisms              | soil                         | short-term (single instance) |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | PNEC     | 0.011 mg/l              | aquatic organisms                  | freshwater                   | short-term (single instance) |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | PNEC     | 0.001 mg/l              | aquatic organisms                  | marine water                 | short-term (single instance) |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | PNEC     | 100 mg/l                | aquatic organisms                  | sewage treatment plant (STP) | short-term (single instance) |

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|                                                                                            |                           |      |                   |                       |                              |                              |
|--------------------------------------------------------------------------------------------|---------------------------|------|-------------------|-----------------------|------------------------------|------------------------------|
| ethoxylated and Glycerol, ethoxylated                                                      |                           |      |                   |                       |                              |                              |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | PNEC | 7.395 mg/kg       | aquatic organisms     | freshwater sediment          | short-term (single instance) |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | PNEC | 0.741 mg/kg       | aquatic organisms     | marine sediment              | short-term (single instance) |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | 85536-23-8<br>827613-35-4 | PNEC | 1.47 mg/kg        | terrestrial organisms | soil                         | short-term (single instance) |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | PNEC | 1 mg/l            | aquatic organisms     | freshwater                   | short-term (single instance) |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | PNEC | 1 mg/l            | aquatic organisms     | marine water                 | short-term (single instance) |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | PNEC | 100 mg/l          | aquatic organisms     | sewage treatment plant (STP) | short-term (single instance) |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | PNEC | 723,500,000 mg/kg | aquatic organisms     | freshwater sediment          | short-term (single instance) |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | PNEC | 723,500,000 mg/kg | aquatic organisms     | marine sediment              | short-term (single instance) |
| Sulfonic acids, petroleum, sodium salts                                                    | 68608-26-4                | PNEC | 868,700,000 mg/kg | terrestrial organisms | soil                         | short-term (single instance) |

## 8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Type of material (long-term)

NBR: acrylonitrile-butadiene rubber (0,425 mm), Breakthrough times of the glove material: 240-480 min

- Type of material (short-term)

NBR: acrylonitrile-butadiene rubber (0,12 mm), Breakthrough times of the glove material: 10-30 min

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.



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Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

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### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

There is no additional information.

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

#### Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

#### Acute toxicity

The classification criteria for these hazard classes are not met.

#### Acute toxicity of components of the mixture

| Name of substance                       | CAS No     | Exposure route | Endpoint | Value        | Species |
|-----------------------------------------|------------|----------------|----------|--------------|---------|
| 2-(2-butoxyethoxy)ethanol               | 112-34-5   | oral           | LD50     | 2,410 mg/kg  | mouse   |
| 2-(2-butoxyethoxy)ethanol               | 112-34-5   | dermal         | LD50     | 2,764 mg/kg  | rabbit  |
| Sulfonic acids, petroleum, sodium salts | 68608-26-4 | dermal         | LD50     | >5,000 mg/kg | rabbit  |

#### Skin corrosion/irritation

The classification criteria for this hazard class are not met.

#### Serious eye damage/eye irritation

The classification criteria for this hazard class are not met.

#### Respiratory or skin sensitisation

The classification criteria for these hazard classes are not met.

#### Germ cell mutagenicity

The classification criteria for this hazard class are not met.

#### Carcinogenicity

The classification criteria for this hazard class are not met.

#### Reproductive toxicity

The classification criteria for this hazard class are not met.

#### Specific target organ toxicity - single exposure

The classification criteria for this hazard class are not met.

#### Specific target organ toxicity - repeated exposure

The classification criteria for this hazard class are not met.

#### Aspiration hazard

The classification criteria for this hazard class are not met.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

### 12.2 Persistence and degradability

Data are not available.

### 12.3 Bioaccumulative potential

Data are not available.

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Data are not available.

### 12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Relevant provisions relating to waste

List of wastes

- Product

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

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## SECTION 14: Transport information

- |      |                              |                                                                       |
|------|------------------------------|-----------------------------------------------------------------------|
| 14.1 | UN number                    | not subject to transport regulations                                  |
| 14.2 | UN proper shipping name      | not relevant                                                          |
| 14.3 | Transport hazard class(es)   | none                                                                  |
| 14.4 | Packing group                | not assigned                                                          |
| 14.5 | Environmental hazards        | non-environmentally hazardous acc. to the dangerous goods regulations |
| 14.6 | Special precautions for user |                                                                       |
- There is no additional information.

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

The cargo is not intended to be carried in bulk.

#### Information for each of the UN Model Regulations

##### **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

Not subject to ADR. Not subject to RID. Not subject to ADN.

##### **International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

##### **International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

### SECTION 15: Regulatory information

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

##### **Relevant provisions of the European Union (EU)**

##### **Restrictions according to REACH, Annex XVII**

| Dangerous substances with restrictions (REACH, Annex XVII)                                 |                                                                                                  |    |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----|
| Name of substance                                                                          | Name acc. to inventory                                                                           | No |
| Reaction mass of Amides, rape-oil, N-(hydroxyethyl), ethoxylated and Glycerol, ethoxylated | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | 3  |
| 2-(2-butoxyethoxy)ethanol                                                                  | 2-(2-butoxyethoxy)ethanol (DEGBE)                                                                | 55 |
| 2-(2-butoxyethoxy)ethanol                                                                  | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | 3  |
| Sulfonic acids, petroleum, sodium salts                                                    | this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC | 3  |

##### **List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list**

none of the ingredients are listed

##### **Seveso Directive**

| 2012/18/EU (Seveso III) |                                       |                                                                                       |       |
|-------------------------|---------------------------------------|---------------------------------------------------------------------------------------|-------|
| No                      | Dangerous substance/hazard categories | Qualifying quantity (tonnes) for the application of lower and upper-tier requirements | Notes |
|                         | not assigned                          |                                                                                       |       |

##### **Directive on industrial emissions (VOCs, 2010/75/EU)**

VOC content 0 %

##### **Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

none of the ingredients are listed

##### **Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)**

none of the ingredients are listed

##### **Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD)**

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none of the ingredients are listed

## National inventories

| Country | Inventory  | Status                         |
|---------|------------|--------------------------------|
| AU      | AICS       | all ingredients are listed     |
| CA      | DSL        | all ingredients are listed     |
| CN      | IECSC      | all ingredients are listed     |
| EU      | ECSI       | not all ingredients are listed |
| EU      | REACH Reg. | all ingredients are listed     |
| JP      | CSCL-ENCS  | all ingredients are listed     |
| JP      | ISHA-ENCS  | not all ingredients are listed |
| KR      | KECI       | all ingredients are listed     |
| MX      | INSQ       | not all ingredients are listed |
| NZ      | NZIoC      | all ingredients are listed     |
| PH      | PICCS      | not all ingredients are listed |
| TR      | CICR       | not all ingredients are listed |
| TW      | TCSI       | all ingredients are listed     |
| US      | TSCA       | all ingredients are listed     |

### Legend

|            |                                                                         |
|------------|-------------------------------------------------------------------------|
| AICS       | Australian Inventory of Chemical Substances                             |
| CICR       | Chemical Inventory and Control Regulation                               |
| CSCL-ENCS  | List of Existing and New Chemical Substances (CSCL-ENCS)                |
| DSL        | Domestic Substances List (DSL)                                          |
| ECSI       | EC Substance Inventory (EINECS, ELINCS, NLP)                            |
| IECSC      | Inventory of Existing Chemical Substances Produced or Imported in China |
| INSQ       | National Inventory of Chemical Substances                               |
| ISHA-ENCS  | Inventory of Existing and New Chemical Substances (ISHA-ENCS)           |
| KECI       | Korea Existing Chemicals Inventory                                      |
| NZIoC      | New Zealand Inventory of Chemicals                                      |
| PICCS      | Philippine Inventory of Chemicals and Chemical Substances               |
| REACH Reg. | REACH registered substances                                             |
| TCSI       | Taiwan Chemical Substance Inventory                                     |
| TSCA       | Toxic Substance Control Act                                             |

## 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

### Abbreviations and acronyms

| Abbr.           | Descriptions of used abbreviations                                                                                                                                                                                    |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2006/15/EC      | Commission Directive establishing a second list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC and amending Directives 91/322/EEC and 2000/39/EC                    |
| ADN             | Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways) |
| ADR             | Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)                                       |
| Aquatic Chronic | Hazardous to the aquatic environment - chronic hazard                                                                                                                                                                 |
| CAS             | Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)                                                                                                                |
| Ceiling-C       | Ceiling value                                                                                                                                                                                                         |

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|             |                                                                                                                                                                                       |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CLP         | Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures                                                                                    |
| DGR         | Dangerous Goods Regulations (see IATA/DGR)                                                                                                                                            |
| DNEL        | Derived No-Effect Level                                                                                                                                                               |
| EC No       | The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)     |
| EH40/2005   | EH40/2005 Workplace exposure limits ( <a href="http://www.nationalarchives.gov.uk/doc/open-government-licence/">http://www.nationalarchives.gov.uk/doc/open-government-licence/</a> ) |
| EINECS      | European Inventory of Existing Commercial Chemical Substances                                                                                                                         |
| ELINCS      | European List of Notified Chemical Substances                                                                                                                                         |
| Eye Dam.    | Seriously damaging to the eye                                                                                                                                                         |
| Eye Irrit.  | Irritant to the eye                                                                                                                                                                   |
| GHS         | "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations                                                                             |
| IATA        | International Air Transport Association                                                                                                                                               |
| IATA/DGR    | Dangerous Goods Regulations (DGR) for the air transport (IATA)                                                                                                                        |
| ICAO        | International Civil Aviation Organization                                                                                                                                             |
| IMDG        | International Maritime Dangerous Goods Code                                                                                                                                           |
| index No    | The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008                                                              |
| IOELV       | Indicative occupational exposure limit value                                                                                                                                          |
| LD50        | Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval                                                      |
| MARPOL      | International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")                                                                                     |
| NLP         | No-Longer Polymer                                                                                                                                                                     |
| PBT         | Persistent, Bioaccumulative and Toxic                                                                                                                                                 |
| PNEC        | Predicted No-Effect Concentration                                                                                                                                                     |
| ppm         | Parts per million                                                                                                                                                                     |
| REACH       | Registration, Evaluation, Authorisation and Restriction of Chemicals                                                                                                                  |
| RID         | Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)               |
| Skin Corr.  | Corrosive to skin                                                                                                                                                                     |
| Skin Irrit. | Irritant to skin                                                                                                                                                                      |
| STEL        | Short-term exposure limit                                                                                                                                                             |
| SVHC        | Substance of Very High Concern                                                                                                                                                        |
| TWA         | Time-weighted average                                                                                                                                                                 |
| VOC         | Volatile Organic Compounds                                                                                                                                                            |
| vPvB        | Very Persistent and very Bioaccumulative                                                                                                                                              |
| WEL         | Workplace exposure limit                                                                                                                                                              |

## Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

## Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

**Safety data sheet**  
according to Regulation (EC) No. 1907/2006 (REACH)



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**List of relevant phrases (code and full text as stated in chapter 2 and 3)**

| Code | Text                                               |
|------|----------------------------------------------------|
| H315 | Causes skin irritation.                            |
| H319 | Causes serious eye irritation.                     |
| H412 | Harmful to aquatic life with long lasting effects. |

**Disclaimer**

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.