



Version number 2.0

### 2.3. Other hazards

Not indicated.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Note that the table shows known hazards of the ingredients in pure form. These hazards are reduced or eliminated when mixed or diluted, see Section 16d.

| Constituent                                                          | Classification                                                                                                                      | Concentration |
|----------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|---------------|
| <b>PROPYLIDYNETRIMETHYL TRIMETHACRYLATE</b>                          |                                                                                                                                     |               |
| CAS No: 3290-92-4<br>EC No: 221-950-4                                | Aquatic Chronic 2; H411                                                                                                             | 10 - 30 %     |
| <b>BISFENOL A GLYCEROLATDIMETAKRYLAT</b>                             |                                                                                                                                     |               |
| CAS No: 1565-94-2<br>EC No: 216-367-7                                | Acute Tox <i>4oral</i> , Skin Irrit 2, Eye Irrit 2, Skin Sens 1, STOT SE <i>3resp</i> ; H302, H315, H319, H317, H335                | ≥1 - <10 %    |
| <b>Urethane dimethacrylate</b>                                       |                                                                                                                                     |               |
| CAS No: 72869-86-4<br>EC No: 276-957-5                               | Eye Irrit 2, Skin Sens 1, Aquatic Chronic 3; H319, H317, H412                                                                       | 1 - 10 %      |
| <b>PROPYLIDYNETRIMETHANOL, ETHOXYLATED, ESTERS WITH ACRYLIC ACID</b> |                                                                                                                                     |               |
| CAS No: 28961-43-5<br>EC No: 500-066-5<br>REACH: 01-2119489900-30    | Eye Irrit 2, Skin Sens 1; H319, H317                                                                                                | <1 %          |
| <b>2-ETHYLHEXYL ACRYLATE</b>                                         |                                                                                                                                     |               |
| CAS No: 103-11-7<br>EC No: 203-080-7<br>Index No: 607-107-00-7       | Skin Irrit 2, Skin Sens 1, STOT SE <i>3resp</i> ; H315, H317, H335                                                                  | <1 %          |
| <b>HYDROQUINONE</b>                                                  |                                                                                                                                     |               |
| CAS No: 123-31-9<br>EC No: 204-617-8<br>Index No: 604-005-00-4       | Acute Tox <i>4oral</i> , Eye Dam 1, Skin Sens 1, Muta 2, Carc 2, Aquatic Acute 1; <i>M</i> = 10; H302, H318, H317, H341, H351, H400 | <0.1 %        |

Explanations to the classification and labelling of the ingredients are given in Section 16e. Official abbreviations are printed in normal font. Text in italics are specifications and/or complements used in the calculation of the classification of this mixture, see Section 16b.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### Generally

In case of concern, or if symptoms occur, call a doctor/physician.

#### Upon breathing in

Fresh air and rest. If symptoms persist seek medical advice.

#### Upon eye contact

Remove contact lenses immediately if possible.

Rinse the eye for several minutes with lukewarm water. If irritation persists call a doctor/ophthalmologist.

#### Upon skin contact

Remove contaminated clothing.

Wash the skin with soap and water.

If symptoms occur, contact a physician.

#### Upon ingestion

Rinse mouth out thoroughly first with water, then SPIT OUT the rinse water. Drink at least half a litre of water and seek medical advice. DO NOT INDUCE VOMITING.

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

#### Upon eye contact

Irritation.

**Upon skin contact**

May cause an allergic skin reaction.  
Prolonged contact may cause skin irritation.

**Upon ingestion**

May cause irritation of mucous membranes, nausea and vomiting.

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

Symptomatic treatment.  
Upon contact with a doctor, make sure to have the label or this safety data sheet with you.

## SECTION 5: Fire-fighting measures

**5.1. Extinguishing media**

Extinguish with water mist, powder, carbon dioxide or alcoholresistant foam.

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

High temperatures and fire can lead to polymerisation, which may cause the packaging to explode.  
Produces fumes containing harmful gases (carbon monoxide and carbon dioxide) when burning, and, in case of incomplete combustion, aldehydes and other toxic, harmful, irritant or environmentally harmful substances.  
Note, risk for discharge of environmentally harmful substances.  
Avoid that water used for extinguishing fire reaches drains. Water used for extinguishing fire should be handled according to current regulations.

**5.3. Advice for fire-fighters**

Protective measures should be taken regarding other material at the site of the fire.  
Contain and collect extinguishing liquid.  
In case of fire use a respirator mask.  
Wear full protective clothing.  
Cool closed containers that were exposed to fire with water.

## SECTION 6: Accidental release measures

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

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).  
Avoid inhalation and exposure to skin and eyes.  
Keep unauthorized and unprotected people at a safe distance.  
Use recommended safety equipment, see section 8.  
Ensure good ventilation.

**6.2. Environmental precautions**

Avoid release to drains, soil or watercourses.  
Dam up the spillage to prevent it reaching street sewers or flowing into the ground.  
Always contact the fire department when accidental spillage of this product occurs.

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

Absorb the liquid with an inert absorbent, vermiculite, for example. Collect the material for disposal at a waste disposal facility.  
Residues left behind after cleaning shall be treated as hazardous waste. For further information, contact the local authority sanitisation works. Present this safety data sheet.

**6.4. Reference to other sections**

See section 8 and 13 for personal protection equipment and disposal considerations.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**

Store this product separately from food items and keep it out of the reach of children and pets.  
Avoid spillage, inhalation and contact with eyes and skin.  
Do not eat, drink or smoke in premises where this product is handled.  
Wash your hands after using the product.  
Remove contaminated clothing.  
Wash contaminated clothing before reuse.  
Use recommended safety equipment, see section 8.  
Local exhaust ventilation may be necessary.  
Keep away from incompatible products.

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

The product should be stored in a manner which prevents hazards to health and the environment. Avoid exposure to humans and animals and do not discharge the product in a sensitive environment.

This product should be stored well out of reach of young children and kept safely apart from products intended for consumption.

Always use sealed and visibly labeled packages.

Store in dry and cool area.

Store in a ventilated space.

Do not store close to incompatible materials (see section 10.5).

## 7.3. Specific end uses

See identified uses in Section 1.2.

# SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

### 8.1.1. National limit values

#### Iron oxide, fume (as Fe)

#### United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 5 mg/m<sup>3</sup>

Short term exposure limit (STEL) 10 mg/m<sup>3</sup>

## HYDROQUINONE

#### United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 0.5 mg/m<sup>3</sup>

## 2,6-BIS(1,1-DIMETHYLETHYL)-4- METHYLPHENOL

#### United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 10 mg/m<sup>3</sup>

## DNEL

### HYDROQUINONE

|          | Type of exposure    | Route of exposure | Value                  |
|----------|---------------------|-------------------|------------------------|
| Consumer | Chronic<br>Systemic | Inhalation        | 1.74 mg/m <sup>3</sup> |
| Worker   | Chronic<br>Systemic | Dermal            | 128 mg/kg              |
| Worker   | Chronic<br>Local    | Inhalation        | 1 mg/m <sup>3</sup>    |
| Worker   | Chronic<br>Systemic | Inhalation        | 7 mg/m <sup>3</sup>    |
| Consumer | Chronic<br>Local    | Inhalation        | 0.5 mg/m <sup>3</sup>  |
| Consumer | Chronic<br>Systemic | Dermal            | 64 mg/kg               |

**PNEC  
HYDROQUINONE**

| Environmental protection target    | PNEC value   |
|------------------------------------|--------------|
| Fresh water                        | 0.114 mg/l   |
| Freshwater sediments               | 0.98 µg/kg   |
| Marine water                       | 0.0114 µg/L  |
| Marine sediments                   | 0.097 µg/kg  |
| Microorganisms in sewage treatment | 0.71 mg/l    |
| Soil (agricultural)                | 0.129 µg/kg  |
| Intermittent                       | 0.00134 mg/l |

**8.2. Exposure controls**

To prevent occupational risks the health hazards for this product or any of the ingredients should be taken into account (see sections 2, 3 and 11), according to EU Directive 89/391 and 98/24 and national jurisdiction for occupational risks.

**8.2.1. Appropriate engineering controls**

Handle in premises which have modern ventilation standards.  
Use local exhaust ventilation.  
Eye-rinsing facilities shall be available at the workplace.

**Eye/face protection**

Use protective glasses with tight seals according to standard EN166.

**Skin protection**

Use protective gloves fulfilling the standard EN374 if there is a risk of direct contact.  
Use suitable protective clothing.

**Respiratory protection**

Use proper protective breathing equipment in case of insufficient ventilation.  
Filter of type A and/or type P3 is recommended.

**8.2.3. Environmental exposure controls**

Work with the product should take place in such a way that the product does not get into drains, waterways, soil and air.

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

|                                                 |                |
|-------------------------------------------------|----------------|
| a) Appearance                                   | Form: paste.   |
| b) Odour                                        | Not indicated  |
| c) Odour threshold                              | Not indicated  |
| d) pH                                           | Not indicated  |
| e) Melting point/freezing point                 | Not indicated  |
| f) Initial boiling point and boiling range      | Not indicated  |
| g) Flash point                                  | Not indicated  |
| h) Evaporation rate                             | Not indicated  |
| i) Flammability (solid, gas)                    | Not applicable |
| j) Upper/lower flammability or explosive limits | Not indicated  |
| k) Vapour pressure                              | Not indicated  |
| l) Vapour density                               | Not indicated  |
| m) Relative density                             | Not indicated  |
| n) Solubility                                   | Not indicated  |
| o) Partition coefficient: n-octanol/water       | Not applicable |
| p) Auto-ignition temperature                    | Not indicated  |
| q) Decomposition temperature                    | Not indicated  |
| r) Viscosity                                    | Not indicated  |
| s) Explosive properties                         | Not applicable |
| t) Oxidising properties                         | Not applicable |

**9.2. Other information**

No data available

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Risk of exothermic polymerisation upon contact with incompatible materials.

### 10.2. Chemical stability

The product is stable at normal storage and handling conditions.

### 10.3. Possibility of hazardous reactions

Danger of bursting of closed systems to vigorous exothermic polymerization. Avoid uncontrolled polymerization.

### 10.4. Conditions to avoid

Protect from heat and direct sunlight.

### 10.5. Incompatible materials

Avoid contact with oxidizers.

Avoid contact with acids.

### 10.6. Hazardous decomposition products

None under normal conditions.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Not indicated.

#### Acute toxicity

The product is not classified as acutely toxic, but it does contain low levels of hazardous substances.

#### PROPYLIDYNETRIMETHYL TRIMETHACRYLATE

LD50 rabbit 24h: > 3000 mg/kg Dermal

LD50 rat 24h: > 5000 mg/kg Orally

#### HYDROQUINONE

LD50 rat 24h: > 900 mg/kg Dermal

LD50 rat 24h: 320 mg/kg Orally

#### Skin corrosion/irritation

The product is neither corrosive nor irritant.

#### Serious eye damage/irritation

Irritating to eyes.

#### Respiratory or skin sensitisation

May cause an allergic skin reaction.

#### Germ cell mutagenicity

The product has a low content of a compound suspected of being mutagenic.

#### Carcinogenicity

The product contains low quantities of a suspected carcinogenic substance.

#### Reproductive toxicity

No toxic effects to reproduction have been reported for the substances in this mixture.

#### STOT-single exposure

No known hazards for occasional exposure.

#### STOT-repeated exposure

No known hazards for repeated exposure.

#### Aspiration hazard

The product is not classified as being toxic for aspiration.

## SECTION 12: Ecological information

### 12.1. Toxicity

Prevent release on land, in water and drains.

Toxic to aquatic life with long lasting effects.

#### PROPYLIDYNETRIMETHYL TRIMETHACRYLATE

LC50 Rainbow trout (*Oncorhynchus mykiss*) 96h: 2 mg/l

EC50 Freshwater water flea (*Daphnia magna*) 48 h: > 9.22 mg/l

## HYDROQUINONE

LC50 fathead minnow (*Pimephales promelas*) 96h: 0.044 mg/L

EC50 Freshwater water flea (*Daphnia magna*) 24h: 0.12 mg/L

IC50 Algae (*Pseudokirchneriella subcapitata*) 72h: 0.335 mg/l

EL50 Bacteria 0.5h: 0.038 mg/l

### 12.2. Persistence and degradability

There is no information regarding persistence or degradability.

### 12.3. Bioaccumulative potential

There is no information regarding bioaccumulation.

### 12.4. Mobility in soil

Information about mobility in nature is not available.

### 12.5. Results of PBT and vPvB assessment

No chemical safety report has been prepared.

### 12.6. Other adverse effects

Data lacking.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Waste handling of the product

Avoid discharge into sewers.

Discarded products must be disposed of as hazardous waste in accordance with regulations.

Not completely emptied packaging can contain remnants of dangerous substances and should therefore be handled as hazardous waste according to the above. Completely emptied packaging can be recycled.

Observe local regulations.

See also national waste regulations.

#### Classification according to 2008/98

Recommended LoW-code: 08 04 09 Waste adhesives and sealants containing organic solvents or other dangerous substances

## SECTION 14: Transport information

Where not otherwise stated the information applies to all of the UN Model Regulations, i.e. ADR (road), RID (railway), ADN (inland waterways), IMDG (sea), and ICAO (IATA) (air).

### 14.1. UN number

3082

### 14.2. UN proper shipping name

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Urethane dimethacrylate, 2,2'-ETHYLENEDIOXYDIETHYL DIMETHACRYLATE)

### 14.3. Transport hazard class(es)

#### Class

9: Other hazardous substances and articles

#### Classification code (ADR/RID)

M6: Environmentally-hazardous substances: pollutant for marine environments, liquid

#### Subsidiary risk (IMDG)

No subsidiary risk according to IMDG

## Labels



### 14.4. Packing group

Packing group III

### 14.5. Environmental hazards

MARINE POLLUTANT

### 14.6. Special precautions for user

#### Tunnel restrictions

Tunnel category: E

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

### 14.8 Other transport information

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres

Stowage category A (IMDG)

Emergency Schedule (EmS) for FIRE (IMDG) F-A

Emergency Schedule (EmS) for SPILLAGE (IMDG) S-F

## SECTION 15: Regulatory information

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

Not indicated.

### 15.2. Chemical safety assessment

Assessment and chemical safety report in accordance with 1907/2006 Annex I has not yet been performed.

## SECTION 16: Other information

### 16a. Indication of where changes have been made to the previous version of the safety data sheet

#### Revisions of this document

Earlier versions

2018-04-06 Changes in section(s) 2, 3, 4, 5, 6, 7, 8, 10, 11, 13.

## 16b. Legend to abbreviations and acronyms used in the safety data sheet

### Full texts for Hazard Class and Category Code mentioned in section 3

|                         |                                                                                                      |
|-------------------------|------------------------------------------------------------------------------------------------------|
| Aquatic Chronic 2       | Toxic to aquatic life with long lasting effects (Category Chronic 2)                                 |
| Acute Tox 4oral         | Acute toxicity (Category 4 oral)                                                                     |
| Skin Irrit 2            | Skin Irritant (Category 2)                                                                           |
| Eye Irrit 2             | Irritates eyes (Category 2)                                                                          |
| Skin Sens 1             | May cause an allergic skin reaction (Category 1)                                                     |
| STOT SE 3resp           | Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp) |
| Aquatic Chronic 3       | Harmful to aquatic life with long-lasting effects (Category Chronic 3)                               |
| Eye Dam 1               | Irreversible Eye Effects (Category 1)                                                                |
| Muta 2                  | Suspected genetic defects (Category 2)                                                               |
| Carc 2                  | Suspected of causing cancer (Category 2)                                                             |
| Aquatic Acute 1; M = 10 | Very toxic to aquatic life (Category Acute 1 M=10)                                                   |

### Explanations of the abbreviations in Section 14

ADR European Agreement concerning the International Transport of Dangerous Goods by Road

RID Regulations concerning the International Transport of Dangerous Goods by Rail

IMDG International Maritime Dangerous Goods Code

ICAO International Civil Aviation Organization (ICAO, 999 University Street, Montreal, Quebec H3C 5H7, Canada)

IATA The International Air Transport Association

Tunnel restriction code: E; Passage through category E tunnels is strictly forbidden

Transport category: 3; Maximum total quantity per transport unit: 1000 kgs or litres

### 16c. Key literature references and sources for data

#### Sources for data

Primary data for the calculation of the hazards has preferentially been taken from the official European classification list, 1272/2008 Annex I, as updated to 2019-10-22.

Where such data was not available, alternative documentation used to establish the official classification was used, e.g. IUCLID (International Uniform Chemical Information Database). As a second alternative, information was used from reputable international chemical industries, and as a third alternative other available information was used, e.g. material safety data sheets from other suppliers or information from non-profit associations, where reliability of the source was assessed by expert opinion. If, in spite of this, reliable information could not be sourced, the hazards were assessed by expert opinions based on the known hazards of similar substances, and according to the principles in 1907/2006 and 1272/2008.

### Full texts for Regulations mentioned in this Safety Data Sheet

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1907/2006 | 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC |
| 2015/830  | COMMISSION REGULATION (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)                                                                                                                                                                                                                                                       |
| 1272/2008 | 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006                                                                                                                                                                                                     |
| EH40/2005 | EH40/2005 Workplace exposure limits                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2008/98   | DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste and repealing certain Directives                                                                                                                                                                                                                                                                                                                                                 |
| 1907/2006 | 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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC |

### 16d. Methods of evaluating information referred to in 1272/2008 Article 9 which was used for the purpose of classification

Hazard calculation for this mixture has been performed as a cumulative assessment with the aid of expert assessments in accordance with 1272/2008 Annex I, where all available information which may be significant to establishing the hazards of the mixture was assessed together, and in accordance with 1907/2006 Annex XI.

## **16e. List of relevant hazard statements and/or precautionary statements**

### **Full texts for hazard statements mentioned in section 3**

H411 Toxic to aquatic life with long lasting effects

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

H412 Harmful to aquatic life with long lasting effects

H318 Causes serious eye damage

H341 Suspected of causing genetic defects <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>

H351 Suspected of causing cancer <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>

H400 Very toxic to aquatic life

## **16f. Advice on any training appropriate for workers to ensure protection of human health and the environment**

### **Warning for misuse**

This product can cause harm if used improperly. The manufacturer, the distributor or the supplier are not responsible for adverse effects if the product is not handled in accordance with its intended use.

### **Other relevant information**

Not indicated

### **Editorial information**



This material safety data sheet has been prepared and checked by KemRisk®, KemRisk Sweden AB, Platensgatan 8, SE-582 20 Linköping, Sweden, [www.kemrisk.se](http://www.kemrisk.se)