

2.2. Label elements

Hazard pictogram



Signal word

Danger

Hazard statements

H302

Harmful if swallowed

H311

Toxic in contact with skin

H314

Causes severe skin burns and eye damage

H317

May cause an allergic skin reaction

H331

Toxic if inhaled

H335

May cause respiratory irritation

H410

Very toxic to aquatic life with long lasting effects

Precautionary statements

P260

Do not breathe gas, mist, vapours, or spray

P280

Wear protective gloves, protective clothing and eye or face protection

P301+P330+P331

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P305+P351+P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P310

Immediately call a POISON CENTER

P403+P233

Store in a well-ventilated place. Keep container tightly closed

P501

Dispose of contents and container to authorised waste disposal facility

Supplemental hazard information

Contains: METHACRYLIC ACID, ISOBUTYLMETHACRYLATE

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
METHACRYLIC ACID		
CAS No: 79-41-4 EC No: 201-204-4 Index No: 607-088-00-5	Acute Tox 3 <i>dermal</i> , Acute Tox 3 <i>vapour</i> , Acute Tox 4 <i>oral</i> , Skin Corr 1A, Skin Sens 1, STOT SE 3 <i>resp</i> , Aquatic Acute 1, Aquatic Chronic 1; <i>M = 1</i> ; H311, H331, H302, H314, H317, H335, H400, H410	75 - 100 %
ISOBUTYLMETHACRYLATE		
CAS No: 97-86-9 EC No: 202-613-0 Index No: 607-113-00-X	Flam Liq 3, Skin Irrit 2, Eye Irrit 2, Skin Sens 1B, STOT SE 3 <i>resp</i> , Aquatic Acute 1; H226, H315, H319, H317, H335, H400	1 - 5 %

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.

Do not use mouth to mouth or mouth to nose resuscitation. Use a suitable device or apparatus to give artificial respiration if breathing has stopped.

For those providing assistance to an injured person should avoid exposure and if risk of exposure exists, use appropriate respiratory protection.

Upon breathing in

It could be hazardous for the person administering artificial ventilation.

Bring the injured person out into fresh air. Give artificial respiration if breathing has stopped. If breathing is difficult let trained personnel administer oxygen. Let the injured person rest in a warm place with fresh air and seek medical advice immediately.

Please contact your doctor even without immediate symptoms. Preventive treatment against life threatening aggravation (pulmonary oedema) may need to be initiated immediately.

Upon eye contact

Remove contact lenses immediately if possible.

Flush immediately with luke-warm water for 15 - 20 minutes with wide-open eyes. Transport the injured person to a hospital immediately.

Important! Also flush during transport to hospital (eye specialist).

Upon skin contact

Wash with large quantities of water (emergency shower) and seek medical assistance.

Remove contaminated clothing.

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 breathing in

May cause chemical burns in mouth and throat if inhaled, as well as coughing and at high concentrations breathing difficulties.

Toxic if inhaled.

In case of serious poisoning, the injured need to be subject to medical observation for at least 48 hours, due to the risk of pulmonary oedema.

Upon eye contact

Causes severe eye burns.

Upon skin contact

Chemical burns may occur.

Toxic when in contact with skin.

May cause an allergic skin reaction.

Upon ingestion

Ingestion triggers corrosion in oral cavity and pharynx, nausea and abdominal pain.

Harmful if swallowed.

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.

Symptoms of poisoning may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Extinguish with water spray, carbon dioxide or foam.

5.2. Special hazards arising from the substance or mixture

Corrosive gases can be dispersed in case of fire.

Note, risk for discharge of environmentally harmful substances.

Note that the extinguishing water may be corrosive.

Avoid that water used for extinguishing fire reaches drains. Water used for extinguishing fire should be handled according

to current regulations.

High temperatures and fire can lead to polymerisation, which may cause the packaging to explode.

5.3. Advice for fire-fighters

When extinguishing fire, wear total-coverage clothing which protects against corrosive substances.

In case of fire use a respirator mask.

Contain and collect extinguishing liquid.

Cool closed containers that were exposed to fire with water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Switch off equipment which has an exposed flame, glows, or has a heat source of some other kind.

Switch off power at the main switch. Do not use the power switch in the room where the spillage has occurred.

Do not inhale the product and avoid exposure to skin and eyes.

Keep unauthorized and unprotected people at a safe distance.

Use recommended safety equipment, see section 8.

In case of spillage in protected water, call the emergency services immediately, tel. 112 (in Europe).

Vacate the spill zone and alert the emergency service. Present this safety data sheet.

Chemical protection suits should be worn for all salvage and decontamination work.

Cleaning of repeated or larger spills of this product should be done by professional cleaners.

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.

Ensure good ventilation after sanitation.

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.

Do not eat, drink or smoke in premises where this product is handled.

Do not inhale the product and avoid exposure to skin, eyes and clothing.

Wash your hands after using the product.

Remove contaminated clothing.

Wash contaminated clothing before reuse.

Work in order to avoid spillage. If spillage does occur, address it immediately in accordance with the directions specified in Section 6 of this safety data sheet.

The product must not be left without supervision during handling.

Use point evacuation, fume cupboard or a similar process ventilation when working with this product.

Use recommended safety equipment, see section 8.

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.

Store separately from food and animal fodder, incl. utensils or surfaces which have been in contact with these things.

Keep well closed.

Store in a well-ventilated and locked place.

The package should be kept in plastic bins in order to prevent corrosive injuries from spillage.

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

METHACRYLIC ACID

United Kingdom (EH40/2005)

Time-weighted-average exposure limit (TWA) 20 ppm / 72 mg/m³

Short term exposure limit (STEL) 40 ppm / 143 mg/m³

DNEL

No data available.

PNEC

No data available.

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.

Wash hands thoroughly after handling and before food intake or smoking.

Select working methods to minimise skin contact.

8.2.1. Appropriate engineering controls

Handle in premises which have modern ventilation standards.

Emergency showers and eye-rinsing facilities must be available at the workplace.

Handle in a fume hood or in a space which is equally safe.

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 total cover protective clothes.

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: liquid. Colour: colourless.
b) Odour	characteristic
c) Odour threshold	Not indicated
d) pH	2 - 2.2
e) Melting point/freezing point	15.8 °C
f) Initial boiling point and boiling range	Not indicated
g) Flash point	65 °C closed cup
h) Evaporation rate	Not indicated
i) Flammability (solid, gas)	Not applicable
j) Upper/lower flammability or explosive limits	Not indicated
k) Vapour pressure	0.13 kPa
l) Vapour density	Not indicated
m) Relative density	1.03 kg/L
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	1.4 mPa·s
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

May polymerise.

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

10.4. Conditions to avoid

Avoid sources of ignition and excessive temperatures.

Protect from heat and direct sunlight.

10.5. Incompatible materials

Avoid contact with oxidizers.

Avoid contact with acids.

Avoid contact with other chemicals.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Ingestion of the mixture in concentrated form may cause serious internal damage.

Acute toxicity

The product is toxic.

Poisonous upon ingestion.

Poisonous upon skin contact.

Harmful if swallowed.

METHACRYLIC ACID

LD50 rabbit 24h: 500 - 1000 mg/kg Dermally

LC50 rat 4h: 7.1 mg/l Inhalation

LD50 rat 24h: 1320 mg/kg Orally

Skin corrosion/irritation

The product may cause corrosive wounds, burning and cracked skin.

Serious eye damage/irritation

Causes severe eye burns.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

No mutagenic effects have been reported for the substance in this mixture.

Carcinogenicity

No carcinogenic effects have been reported for the substances in this product.

Reproductive toxicity

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

STOT-single exposure

May cause potent irritation in the airways/lungs.

Irritation or burns may occur in the respiratory tract if inhaled or ingested.

STOT-repeated exposure

The criteria for classification cannot be considered fulfilled based on available data.

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.

Very toxic to aquatic organisms with long-term adverse effects.

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

The product is acidic and can lower the pH-value locally when discharged into water.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste handling of the product

Avoid discharge into sewers.

May not be disposed of with household waste.

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

2922

14.2. UN proper shipping name

CORROSIVE LIQUID, TOXIC, N.O.S. (METHACRYLIC ACID, ISOBUTYLMETHACRYLATE)

14.3. Transport hazard class(es)

Class

8: Corrosive substances

Classification code (ADR/RID)

CT1: Corrosive substances, toxic: Liquid

Subsidiary risk (IMDG)

IMDG-class 6.1 (Toxic and harmful substances)

Labels



14.4. Packing group

Packing group I

14.5. Environmental hazards

MARINE POLLUTANT

14.6. Special precautions for user

Tunnel restrictions

Tunnel category: C/D

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: 1; Maximum total quantity per transport unit 20 kg or liters

Stowage category B (IMDG)

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

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

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

2018-04-09 Changes in section(s) 2, 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

Acute Tox 3 <i>dermal</i>	Acute toxicity (Category 3 skin)
Acute Tox 3 <i>vapour</i>	Acute toxicity (Category 3 vapour)
Acute Tox 4 <i>oral</i>	Acute toxicity (Category 4 oral)
Skin Corr 1A	Corrosive (Category 1A)
Skin Sens 1	May cause an allergic skin reaction (Category 1)
STOT SE 3 <i>resp</i>	Specific target organ toxicity - single exposure; May cause respiratory irritation (Category 3 resp)
Aquatic Acute 1	Very toxic to aquatic life (Category Acute 1)
Aquatic Chronic 1; <i>M = 1</i>	Very toxic to aquatic life with long lasting effects to aquatic environments (Category Chronic 1)
Flam Liq 3	Flammable liquids (Category 3)
Skin Irrit 2	Skin Irritant (Category 2)
Eye Irrit 2	Irritates eyes (Category 2)
Skin Sens 1B	May cause an allergic skin reaction (Category 1B)

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: C/D; Tank carriage: Passage forbidden through tunnels of category C, D, and E; Other carriage:

Passage forbidden through tunnels of category D and E

Transport category: 1; Maximum total quantity per transport unit 20 kg or liters

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

H311 Toxic in contact with skin
H331 Toxic if inhaled
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H335 May cause respiratory irritation
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H226 Flammable liquid and vapour
H315 Causes skin irritation
H319 Causes serious eye irritation

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

Warning for misuse

This product can cause severe injuries if used improperly. Read and follow carefully the instructions in this safety sheet and other appropriate risk information. At professional use the employer is responsible for the staff being well aware of the risks.

Other relevant information

Not indicated

Editorial information



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