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# Material Safety Data Sheet

# 2-Hydroxyethyl methacrylate

# **Section 1: Chemical Product and Company Identification**

Product Name: 2-Hydroxyethyl methacrylate

Catalog Codes: Not applicable.

CAS#: 868-77-9

RTECS: Not applicable.
TSCA: Not applicable.
CI#: Not applicable.

Synonym: 1,2-Ethanediol mono(2-methylpropenoate), Glycol methacrylate, HEMA

Chemical Name: Not applicable.
Chemical Formula: Not applicable.

Contact Information for Emergency: (0086) 551 65418677

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# Section 2: Composition and Information on Ingredients

Composition:

NameCAS # %By Weight2-Hydroxyethyl methacrylate868-77-9 $\geqslant 98.0\%$ 

Toxicological Data on Ingredients: Not applicable.

# **Section 3: Hazards Identification**

#### Classification of the substance or mixture

# Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Skin irritation (Category 2)

Eye irritation (Category 2)

Skin sensitization (Category 1)

### Classification according to EU Directives 67/548/EEC or 1999/45/EC

May cause sensitization by skin contact. Irritating to eyes and skin.

#### Label elements

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

Pictogram

Signal word Warning

Hazard statement(s)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

Precautionary statement(s)

P280 Wear protective gloves.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard none

Statements

# According to European Directive 67/548/EEC as amended.

Hazard symbol(s)

R-phrase(s)

R36/38 Irritating to eyes and skin.

R43 May cause sensitization by skin contact.

S-phrase(s)

S26 In case of contact with eyes, rinse immediately with plenty of water and

seek medical advice.

S36/37 Wear suitable protective clothing and gloves.

Other hazards - none

# Section 4: First Aid Measures

# **Description of first aid measures**

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

# Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# Indication of any immediate medical attention and special treatment needed

no data available

# Section 5: FIREFIGHTING MEASURES

# **Extinguishing media**

# Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

# Special hazards arising from the substance or mixture

Carbon oxides

# Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### **Further information**

no data available

# Section 6: Accidental Release Measures

# Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

# **Environmental precautions**

Do not let product enter drains.

# Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### Reference to other sections

For disposal see section 13.

# Section 7: Handling and Storage

## Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

# Conditions for safe storage, including any incompatibilities

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

Recommended storage temperature: 2 - 8 °C

#### Specific end use(s)

no data available

# **Section 8: Exposure Controls/Personal Protection**

#### **Control parameters**

### Components with workplace control parameters

# 8.2 Exposure controls

# Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

# Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

# Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

# **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# **Section 9: Physical and Chemical Properties**

a) Appearance Form: clear, liquid

Colour: colourless b) Odour ester-like

- c) Odour Threshold no data available
- d) pH no data available
- e) Melting point/freezing

point

Melting point/range: < -60 °C

f) Initial boiling point and

boiling range

67 °C at 4,7 hPa - lit.

- g) Flash point 96 °C closed cup
- h) Evaporation rate no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower

flammability or

explosive limits

no data available

- k) Vapour pressure 0,1 hPa at 20 °C
- I) Vapour density no data available
- m) Relative density 1,073 g/mL at 25 °C
- n) Water solubility no data available
- o) Partition coefficient: noctanol/

water

log Pow: -0,53 at 20 °C

p) Auto-ignition no data available

temperature

q) Decomposition

temperature

no data available

- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available

# Other safety information

no data available

# Section 10: Stability and Reactivity Data

### Reactivity

no data available

# **Chemical stability**

no data available

Contains the following stabiliser(s):

Mequinol (>=7 - <=50 ppm)

# Possibility of hazardous reactions

no data available

### Conditions to avoid

Exposure to moisture. Heat. Light.

# Incompatible materials

Oxidizing agents, Free radical initiators, Steel (all types and surface treatments), Peroxides

# Hazardous decomposition products

Other decomposition products - no data available

# Section 11: Toxicological Information

# Information on toxicological effects

# **Acute toxicity**

LD50 Oral - rat - 5.564 mg/kg

LD50 Dermal - rabbit - > 3.000 mg/kg

# Skin corrosion/irritation

Skin - rabbit - irritating - 24 h

# Serious eye damage/eye irritation

Eyes - rabbit - Moderate eye irritation - 24 h - Draize Test

# Respiratory or skin sensitization

Maximisation Test - guinea pig - OECD Test Guideline 406 - May cause sensitization by skin contact.

# Germ cell mutagenicity

no data available

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

# Reproductive toxicity

Reproductive toxicity - rat - female - Oral

Effects on Fertility: Pre-implantation mortality (e.g., reduction in number of implants per female; total number of implants per corpora lutea). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Effects on Embryo or Fetus: Fetal death.

# Specific target organ toxicity - single exposure

no data available

# Specific target organ toxicity - repeated exposure

no data available

# **Aspiration hazard**

no data available

#### Potential health effects

**Inhalation** May be harmful if inhaled. Causes respiratory tract irritation.

Ingestion May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. Causes skin irritation.

Eyes Causes serious eye irritation.

# Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# **Additional Information**

RTECS: Not available

# Section 12: Ecological Information

# **Toxicity**

Toxicity to fish flow-through test - Pimephales promelas (fathead minnow) - 227 mg/l - 96 h

# Persistence and degradability

Biodegradability aerobic Chemical oxygen demand - Exposure time 28 d

Result: 84 % - Readily biodegradable.

Method: Closed Bottle test

Bioaccumulative potential

no data available

# Mobility in soil

no data available

### Results of PBT and vPvB assessment

no data available

# Other adverse effects

no data available

# **Section 13: Disposal Considerations**

#### Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

# Contaminated packaging

ADR/RID: - IMDG: - IATA: -

Dispose of as unused product.

# **Section 14: Transport Information**

### **UN** number

UN proper shipping name
ADR/RID: Not dangerous goods
IMDG: Not dangerous goods
IATA: Not dangerous goods
Transport hazard class(es)
ADR/RID: - IMDG: - IATA: -

# Packaging group

ADR/RID: - IMDG: - IATA: - Environmental hazards

ADR/RID: no IMDG Marine Pollutant: no IATA: no

Special precautions for user

no data available

# Section 15: Other Regulatory Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

no data available

# **Chemical Safety Assessment**

no data available

# Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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