# Chemical Safety Data Sheet MSDS / SDS

# 2-Morpholinoethanol

Revision Date:2025-02-01 Revision Number:1

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

# **Product identifier**

Product name	: 2-Morpholinoethanol	
CBnumber	: CB0304252	
CAS	: 622-40-2	
EINECS Number	: 210-734-5	
Synonyms	: 2-morpholinoethan-1-ol,2-morpholinoethanol	
Relevant identified uses of the substance or mixture and uses advised against		
Relevant identified uses	: For R&D use only. Not for medicinal, household or other use.	
Uses advised against	: none	
Company Identification		
Company	: Chemicalbook	
Address	: Building 1, Huihuang International, Shangdi 10th Street, Haidian District, Beijing	
Telephone	: 400-158-6606	

# SECTION 2: Hazards identification

# GHS Label elements, including precautionary statements

Symbol(GHS)



Signal word

Warning

#### Precautionary statements

P405 Store locked up.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continuerinsing.

P304+P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P264 Wash skin thouroughly after handling.

P264 Wash hands thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

#### Hazard statements

H335 May cause respiratory irritation

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# SECTION 3: Composition/information on ingredients

## Substance

Product name	: 2-Morpholinoethanol
Synonyms	: 2-morpholinoethan-1-ol,2-morpholinoethanol
CAS	: 622-40-2
EC number	: 210-734-5
MF	: C6H13NO2
MW	: 131.17

# 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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

#### 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, Nitrogen oxides (NOx)

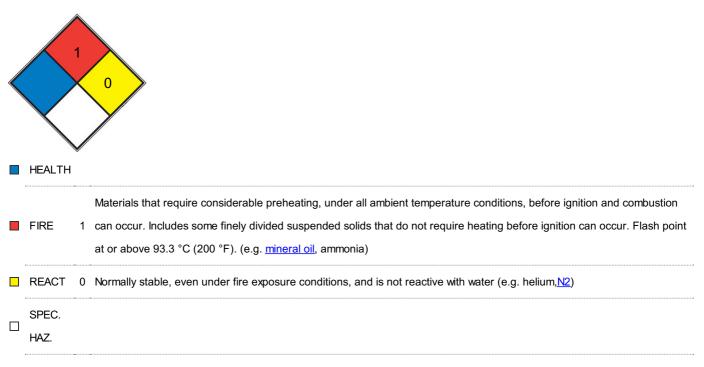
## Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# **Further information**

No data available

## **NFPA 704**



# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

# **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. Normal measures for preventive fire protection.

For precautions see section 2.2.

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

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

# Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# SECTION 8: Exposure controls/personal protection

#### control parameter

#### Hazard composition and occupational exposure limits

Does not contain substances with occupational exposure limits.

#### 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

Safety glasses with side-shields conforming to EN166 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 Regulation (EU) 2016/425 and the standard EN 374 derived from it. Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,2 mm Break through time: 480 min

Material tested:Dermatril? P (KCL 743 / Aldrich Z677388, Size M)

Splash contact Material: Nitrile rubber

Minimum layer thickness: 0,11 mm Break through time: 232 min

Material tested:Dermatril? (KCL 740 / Aldrich Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved

gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific

situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

**Body Protection** 

Impervious clothing, 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).

Control of environmental exposure

Do not let product enter drains.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

Appearance	colourless clear, viscous liquid
Odour	No data available
Odour Threshold	No data available
рН	10.7 (100g/l, H2O, 20℃)
Melting point/freezing point	-1 °C
Initial boiling point and boiling range	227 °C at 1009 hPa - lit.
Flash point	98 °C - closed cup
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive	1.5-9.8%(V)
limits	
Vapour pressure	No data available
Vapour density	No data available
Relative density	1,083 g/cm3 at 25 °C
Water solubility	No data available
Partition coefficient: n-octanol/water	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

# Other safety information

No data available

# SECTION 10: Stability and reactivity

# Reactivity

No data available

# **Chemical stability**

Stable under recommended storage conditions.

# Possibility of hazardous reactions

No data available

# Conditions to avoid

No data available

# Incompatible materials

Strong oxidizing agents, Strong acids

# Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)

Other decomposition products - No data available In the event of fire: see section 5

# SECTION 11: Toxicological information

# Information on toxicological effects

#### Acute toxicity

LD50 Oral - Rat - 5.500 mg/kg Remarks: Gastrointestinal:Other changes. LD50 Dermal - Rabbit - > 16.000 mg/kg

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitisation

No data available

#### Germ cell mutagenicity

Rat Liver

Unscheduled DNA synthesis

#### 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** 

No data available

#### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

#### Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

#### Additional Information

RTECS: QE3510000

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

# SECTION 12: Ecological information

# Toxicity

## Toxicity to fish

LC50 - Pimephales promelas (fathead minnow) - 2.710 mg/l - 96 h

# Persistence and degradability

No data available

# **Bioaccumulative potential**

No data available

## Mobility in soil

No data available

## Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 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. Contact a licensed professional waste disposal service to dispose of this material.

# **Contaminated packaging**

Dispose of as unused product.

# SECTION 14: Transport information

# **UN** number

ADR/RID: - IMDG: - IATA: -

### 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: Regulatory information**

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

 Regulations on the Safety Management of Hazardous Chemicals

 China Catalog of Hazardous chemicals 2015:Not Listed. website: https://www.mem.gov.cn/

 Measures for Environmental Management of New Chemical Substances

 Vietnam National Chemical Inventory:Listed. website: https://chemicaldata.gov.vn/

 United States Toxic Substances Control Act (TSCA) Inventory:Listed. website: https://www.epa.gov/

 Philippines Inventory of Chemicals and Chemical Substances (PICCS):Listed. website: https://emb.gov.ph/

 New Zealand Inventory of Chemicals (NZIoC):Listed. website: https://www.epa.govt.nz/

 Korea Existing Chemicals List (KECL):Listed. website: http://ncis.nier.go.kr

 European Inventory of Existing Commercial Chemical Substances (EINECS):Listed. website: https://echa.europa.eu/

 EC Inventory:Listed.

 Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Listed. website: https://www.mee.gov.cn/

# **SECTION 16: Other information**

#### Abbreviations and acronyms

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

CAS: Chemical Abstracts Service

EC50: Effective Concentration 50%

IATA: International Air Transportation Association

IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail

STEL: Short term exposure limit

TWA: Time Weighted Average

## References

- [1] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple
- [2] ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

[3] ECHA - European Chemicals Agency, website: https://echa.europa.eu/

[4] eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website:

http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

- [5] ERG Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg
- [6] Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp
- [7] HSDB Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm
- [8] IARC International Agency for Research on Cancer, website: http://www.iarc.fr/
- [9] IPCS The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home
- [10] Sigma-Aldrich, website: https://www.sigmaaldrich.com/

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