# Chemical Safety Data Sheet MSDS / SDS

# 2-(Diethylamino)-ethyl acrylate

Revision Date:2024-04-27 Revision Number:1

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

# **Product identifier**

Product name	: 2-(Diethylamino)-ethyl acrylate				
CBnumber	: CB7386921				
CAS	: 2426-54-2				
EINECS Number	: 219-378-5				
Synonyms	: 2-(Diethylamino)ethyl acrylate				
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.				
Relevant identified uses Uses advised against	_				

# **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

Danger

Precautionary statements

P310 Immediately call a POISON CENTER or doctor/physician.

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

Continuerinsing.

P302+P350 IF ON SKIN: Gently wash with plenty of soap and water.

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

#### Hazard statements

H317 May cause an allergic skin reaction

H314 Causes severe skin burns and eye damage

H310 Fatal in contact with skin

H302 Harmful if swallowed

1

# SECTION 3: Composition/information on ingredients

# Substance

Product name	: 2-(Diethylamino)-ethyl acrylate
Synonyms	: 2-(Diethylamino)ethyl acrylate
CAS	: 2426-54-2
EC number	: 219-378-5
MF	: C9H17NO2
MW	: 171.24

# SECTION 4: First aid measures

### Description of first aid measures

#### General advice

Consult a physician. Show this material 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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. 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

Do NOT induce vomiting. 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

Small (incipient) fires must be extinguished with alcohol resistant foam, dry chemical powder or carbon dioxide. Large amounts of water are ineffective. Cool containers with large amounts of water.

# Special hazards arising from the substance or mixture

Carbon oxides Nitrogen oxides (NOx) Combustible.

# Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

# **Further information**

Use water spray to cool unopened containers.

### **NFPA 704**

2	^ 2 ✓	1
HEALTH	2	Intense or continued but not chronic exposure could cause temporary incapacitation or possible residual injury (e.g. <u>diethyl</u> <u>ether</u> , ammonium phosphate, iodine)
FIRE	2	Must be moderately heated or exposed to relatively high ambient temperature before ignition can occur and multiple finely divided suspended solids that do not require heating before ignition can occur. Flash point between 37.8 and 93.3 °C (100 and 200 °F). (e.g. diesel fuel, <u>sulfur</u> )
REACT	1	Normally stable, but can become unstable at elevated temperatures and pressures (e.g. propene)
SPEC. HAZ.	<b>1</b>	

# SECTION 6: Accidental release measures

# Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

# **Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet- brushing and place in container for disposal according to local regulations (see section 13). 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

### Advice on safe handling

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

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

#### Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

For precautions see section 2.2.

### Conditions for safe storage, including any incompatibilities

### Storage conditions

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place. Moisture sensitive.

### 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**

#### Personal protective equipment

#### Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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. 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) Chemical Book

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

# SECTION 9: Physical and chemical properties

# Information on basic physicochemical properties

OdourNo data availableOdour ThresholdNo data availablepHNo data availableMelting point/freezing point-60°CInitial boiling point and boiling range199 °C - lit.Flash point73,9 °C - closed cupEvaporation rateNo data availableFlammability (solid, gas)No data availableUpper/lower flammability or explosiveNo data availablelimits	
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Upper/lower flammability or explosive No data available	
limits	
Vapour pressure 0.77 psi ( 20 °C)	
Vapour density No data available	
Relative density 0,922 g/cm3 at 25 °C - lit. No data avail	able
Water solubility No data available	
Partition coefficient: n-octanol/water No data available	
Autoignition temperature No data available	
Decomposition temperature No data available	
Viscosity Viscosity, kinematic: No data available V	/iscosity, dynamic: 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

Rust Avoid moisture. Heat, flames and sparks.

#### Incompatible materials

Strong oxidizing agentsHeavy metal salts, Strong oxidizing agents, Water, Catalysts, Carbon dioxide (CO2)

## Hazardous decomposition products

In the event of fire: see section 5

# SECTION 11: Toxicological information

#### Information on toxicological effects

#### Acute toxicity

Acute toxicity estimate Oral - 770 mg/kg (Calculation method) LD50 Oral - Rat - 770 mg/kg Inhalation Acute toxicity estimate Dermal - 185 mg/kg (Calculation method) LD50 Dermal - Rabbit - 185 mg/kg Skin corrosion/irritation Skin - Rabbit Skin - Rabbit Serious eye damage/eye irritation No data available Respiratory or skin sensitization No data available Germ cell mutagenicity No data available Carcinogenicity No data available **Reproductive toxicity** No data available Specific target organ toxicity - single exposure No data available Specific target organ toxicity - repeated exposure No data available Aspiration hazard No data available

# SECTION 12: Ecological information

Toxicity

No data available

# 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

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and nonrecyclable 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: 2927 IMDG: 2927 IATA: 2927

# UN proper shipping name

ADR/RID: TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-(Diethylamino)ethyl acrylate) IMDG: TOXIC LIQUID, CORROSIVE, ORGANIC, N.O.S. (2-(Diethylamino)ethyl acrylate) IATA: Toxic liquid, corrosive, organic, n.o.s. (2-(Diethylamino)ethyl acrylate)

# Transport hazard class(es)

ADR/RID: 6.1 (8) IMDG: 6.1 (8) IATA: 6.1 (8)

## Packaging group

ADR/RID: II IMDG: II IATA: II

#### **Environmental hazards**

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

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

EC Inventory:Listed.

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

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

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

Chinese Chemical Inventory of Existing Chemical Substances (China IECSC):Not Listed. website: https://www.mee.gov.cn/

Korea Existing Chemicals List (KECL):Not Listed. website: http://ncis.nier.go.kr

New Zealand Inventory of Chemicals (NZIoC):Not Listed. website: https://www.epa.govt.nz/

Philippines Inventory of Chemicals and Chemical Substances (PICCS):Not Listed. website: https://emb.gov.ph/

# **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/

#### **Disclaimer:**

The information in this MSDS is only applicable to the specified product, unless otherwise specified, it is not applicable to the mixture of this product and other substances. This MSDS only provides information on the safety of the product for those who have received the appropriate professional training for the user of the product. Users of this MSDS must make independent judgments on the applicability of this SDS. The authors of this MSDS will not be held responsible for any harm caused by the use of this MSDS.