# Chemical Safety Data Sheet MSDS / SDS

# N,N-Diisopropylethylamine

Revision Date: 2024-08-24 Revision Number: 1

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

#### **Product identifier**

Product name : N,N-Diisopropylethylamine

 CBnumber
 : CB4854144

 CAS
 : 7087-68-5

 EINECS Number
 : 230-392-0

 Synonyms
 : dipea, DIEA

### 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**

### Classification of the substance or mixture

Flammable liquids, Category 2

Acute toxicity - Category 4, Oral

Serious eye damage, Category 1

Acute toxicity - Category 3, Inhalation

Specific target organ toxicity - single exposure, Category 3

#### Label elements

### Pictogram(s)

....

Signal word Danger

### Hazard statement(s)

H225 Highly Flammable liquid and vapour

H226 Flammable liquid and vapour

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

H315 Causes skin irritation

H318 Causes serious eye damage

H331 Toxic if inhaled

H335 May cause respiratory irritation

H402 Harmful to aquatic life

H412 Harmful to aquatic life with long lasting effects

### Precautionary statement(s)

P201 Obtain special instructions before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P264 Wash hands thoroughly after handling.

P264 Wash skin thouroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

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

P311 Call a POISON CENTER or doctor/physician.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

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

Continuerinsing.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P370+P378 In case of fire: Use ... for extinction.

P405 Store locked up.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container to.....

#### Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting/...] equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

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

P264 Wash ... thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

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

P271 Use only outdoors or in a well-ventilated area.

### Response

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water [or shower].

P370+P378 In case of fire: Use ... to extinguish.

P301+P317 IF SWALLOWED: Get medical help.

P330 Rinse mouth.

P305+P354+P338 IF IN EYES: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P317 Get medical help.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P316 Get emergency medical help immediately.

P321 Specific treatment (see ... on this label).

P319 Get medical help if you feel unwell.

### Storage

P403+P235 Store in a well-ventilated place. Keep cool.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

### Disposal

P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

### Other hazards

no data available

# SECTION 3: Composition/information on ingredients

#### **Substance**

Product name : N,N-Diisopropylethylamine

 Synonyms
 : dipea,DIEA

 CAS
 : 7087-68-5

 EC number
 : 230-392-0

 MF
 : C8H19N

 MW
 : 129.24

## SECTION 4: First aid measures

### Description of first aid measures

### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately.

Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

#### Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control

Center immediately.

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

no data available

### Indication of any immediate medical attention and special treatment needed

no data available

# **SECTION 5: Firefighting measures**

### **Extinguishing media**

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

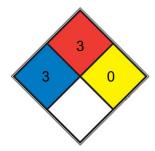
### **Specific Hazards Arising from the Chemical**

no data available

### Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### **NFPA 704**



Short exposure could cause serious temporary or moderate residual injury (e.g. <u>liquid hydrogen, sulfuric acid, calcium</u>

HEALTH 3

hypochlorite, hexafluorosilicic acid)

Liquids and solids (including finely divided suspended solids) that can be ignited under almost all ambient temperature

3 conditions. Liquids having a flash point below 22.8 °C (73 °F) and having a boiling point at or above 37.8 °C (100 °F) or having a flash point between 22.8 and 37.8 °C (73 and 100 °F). (e.g. gasoline, acetone)

■ REACT 0 Normally stable, even under fire exposure conditions, and is not reactive with water (e.g. helium, №)

SPEC.

FIRE

### SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### Methods and materials for containment and cleaning up

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use sparkproof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

# SECTION 7: Handling and storage

### Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

# SECTION 8: Exposure controls/personal protection

### **Control parameters**

### Occupational Exposure limit values

no data available

### **Biological limit values**

no data available

### **Exposure controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the riskelimination area.

### Individual protection measures

### Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

SECTION 9: Physical and chemical properties

### Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. 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.

### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

### Thermal hazards

no data available

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# Information on basic physicochemical properties

Physical state	Liquid
Colour	APHA: <20
Odour	no data available
Melting point/freezing point	162°C(lit.)
Boiling point or initial boiling point and	128.33 °C. Atm. press.:1 013.25 hPa. Remarks:Intrapolated value.
boiling range	
Flammability	no data available
Lower and upper explosion	0.7-6.3%(V)
limit/flammability limit	
Flash point	12 °C. Atm. press.:101.3 kPa.
Auto-ignition temperature	260.4 °C. Atm. press.:1 013 hPa.
Decomposition temperature	no data available
pH	12.3 (H2O, 20℃)(as an emulsion)
Kinematic viscosity	dynamic viscosity (in mPa s) = 1.22. Temperature:20°C. Remarks:1.22 mPa.s at 20.0 °C ± 0.2
	$^{\circ}$ C.;dynamic viscosity (in mPa s) = 1.07. Temperature:40 $^{\circ}$ C. Remarks:1.07 mPa.s at 40.0 $^{\circ}$ C $\pm$ 0.2
	°C.
Solubility	miscible
Partition coefficient n-octanol/water	log Pow = < -2.19. Remarks:±0.23.;log Pow = < -1.8. Remarks:±0.14.;log Pow = -0.22. Remarks:
	±0.05.
Vapour pressure	31 mmHg ( 37.7 °C)
Density and/or relative density	0.755 (20/4℃)
Relative vapour density	0.755 (20/4℃)
Particle characteristics	no data available

# SECTION 10: Stability and reactivity

# Reactivity

no data available

### **Chemical stability**

no data available

### Possibility of hazardous reactions

no data available

### **Conditions to avoid**

no data available

### Incompatible materials

no data available

### Hazardous decomposition products

no data available

# **SECTION 11: Toxicological information**

### **Acute toxicity**

- Oral: LD50 rat (male/female) > 200 < 500 mg/kg bw. Remarks: No mortality occurred at 200 mg/kg bw (3 male and 3 female animals), whereas 100% mortality was observed at 500 and 2000 mg/kg bw (only females).
- Inhalation: LC50 rat (male/female) 2.63 mg/L air (analytical).
- Dermal: LD0 rat (male/female) > 2 000 mg/kg bw.

### Skin corrosion/irritation

no data available

### Serious eye damage/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

### STOT-single exposure

no data available

### STOT-repeated exposure

no data available

### **Aspiration hazard**

no data available

# SECTION 12: Ecological information

# **Toxicity**

Toxicity to fish: LC50 - Danio rerio (previous name: Brachydanio rerio) - 69.7 mg/L - 96 h.

Toxicity to daphnia and other aquatic invertebrates: EC50 - Daphnia magna - 28.1 mg/L - 48 h.

Toxicity to algae: EC50 - Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum) - 150 mg/L - 72 h.

Toxicity to microorganisms: EC50 - activated sludge of a predominantly domestic sewage - 912 mg/L - 3 h. Remarks: Respiration rate.

### Persistence and degradability

no data available

### Bioaccumulative potential

no data available

### Mobility in soil

no data available

#### Other adverse effects

no data available

# **SECTION 13: Disposal considerations**

### **Disposal methods**

### Product

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

### Contaminated packaging

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

# **SECTION 14: Transport information**

### **UN Number**

ADR/RID: UN3286 (For reference only, please check.)

IMDG: UN3286 (For reference only, please check.)

IATA: UN3286 (For reference only, please check.)

## **UN Proper Shipping Name**

ADR/RID: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (For reference only, please check.)

IMDG: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (For reference only, please check.)

IATA: FLAMMABLE LIQUID, TOXIC, CORROSIVE, N.O.S. (For reference only, please check.)

### Transport hazard class(es)

ADR/RID: 3 (For reference only, please check.)

IMDG: 3 (For reference only, please check.)

IATA: 3 (For reference only, please check.)

### Packing group, if applicable

ADR/RID: I (For reference only, please check.)
IMDG: I (For reference only, please check.)

IATA: I (For reference only, please check.)

### **Environmental hazards**

ADR/RID: No IMDG: No IATA: No

### Special precautions for user

no data available

### Transport in bulk according to IMO instruments

no data available

# **SECTION 15: Regulatory information**

### Safety, health and environmental regulations specific for the product in question

**European Inventory of Existing Commercial Chemical Substances (EINECS)** 

Listed.

**EC Inventory** 

Listed.

United States Toxic Substances Control Act (TSCA) Inventory

Listed.

China Catalog of Hazardous chemicals 2015

Listed.

New Zealand Inventory of Chemicals (NZIoC)

Listed.

**PICCS** 

Not Listed.

Vietnam National Chemical Inventory

Listed.

**IECSC** 

Listed.

Korea Existing Chemicals List (KECL)

Listed.

# **SECTION 16: Other information**

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

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

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

IMDG: International Maritime Dangerous Goods

IATA: International Air Transportation Association

TWA: Time Weighted Average

STEL: Short term exposure limit

LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%

### References

IPCS - The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home

HSDB - Hazardous Substances Data Bank, website: https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm

IARC - International Agency for Research on Cancer, website: http://www.iarc.fr/

eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: http://www.echemportal.org/echemportal/index?pageID=0&request\_locale=en

CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple

ChemlDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp

ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: http://www.phmsa.dot.gov/hazmat/library/erg

Germany GESTIS-database on hazard substance, website: http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp

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

### Disclaimer:

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