

## Chemical Safety Data Sheet MSDS / SDS

**DIMETHYLCYANAMIDE**

Revision Date:2026-05-31 Revision Number:1

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****Product identifier**

Product name : DIMETHYLCYANAMIDE  
CBnumber : CB9346897  
CAS : 1467-79-4  
EINECS Number : 215-991-7  
Synonyms : Dimethylcyanamide,N,N-dimethylcyanamide

**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 : 010-86108875

**SECTION 2: Hazards identification****GHS Label elements, including precautionary statements**

Symbol(GHS)



Signal word

Danger

**Precautionary statements**

P501 Dispose of contents/container to....  
P405 Store locked up.  
P403+P235 Store in a well-ventilated place. Keep cool.  
P370+P378 In case of fire: Use ... for extinction.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P271 Use only outdoors or in a well-ventilated area.  
P270 Do not eat, drink or smoke when using this product.  
P264 Wash skin thoroughly after handling.  
P262 Do not get in eyes, on skin, or on clothing.  
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

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

#### **Hazard statements**

H332 Harmful if inhaled

H310 Fatal in contact with skin

H301 Toxic if swallowed

H227 Combustible liquid

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## SECTION 3: Composition/information on ingredients

### **Substance**

Product name	: DIMETHYLCYANAMIDE
Synonyms	: Dimethylcyanamide,N,N-dimethylcyanamide
CAS	: 1467-79-4
EC number	: 215-991-7
MF	: C <sub>3</sub> H <sub>6</sub> N <sub>2</sub>
MW	: 70.09

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## SECTION 4: First aid measures

### **If inhaled**

Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

### **In case of skin contact**

Take off all contaminated clothing immediately. Wash off with soap and plenty of water. Immediately call a POISON CENTER or doctor/ physician.

### **In case of eye contact**

Rinse with plenty of water. If easy to do, remove contact lens, if worn. Immediately call a POISON CENTER or doctor/ physician.

### **If swallowed**

Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.

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

None known.

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## SECTION 5: Firefighting measures

### **Suitable extinguishing media**

Dry powder, Foam, Water spray, Carbon dioxide (CO<sub>2</sub>)

### **Specific hazards during fire fighting**

No information available.

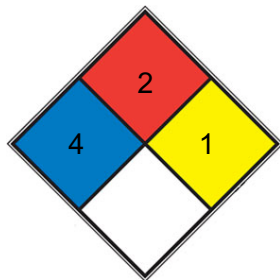
## Specific extinguishing methods

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Immediately evacuate personnel to safe areas. Remove undamaged containers from fire area if it is safe to do so.

## Special protective equipment for fire-fighters

Use personal protective equipment.

## NFPA 704



HEALTH 4 Very short exposure could cause death or major residual injury (e.g. hydrogen cyanide, phosgene, methyl isocyanate, [hydrofluoric acid](#))

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, [sulfur](#))

REACT 1 Normally stable, but can become unstable at elevated temperatures and pressures (e.g. [propene](#))

SPEC.  
 HAZ.

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## SECTION 6: Accidental release measures

### Personal precautions, protective equipment and emergency procedures

Wear suitable protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.

### Environmental precautions

Prevent product from entering drains.

### Methods and materials for containment and cleaning up

Collect as much of the spill as possible with a suitable absorbent material.

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## SECTION 7: Handling and storage

### Handling

#### Technical measures

Prevent generation of vapor or mist. Take precautionary measures against static discharge. Use explosion-proof equipment.

**Local/Total ventilation**

Ensure adequate ventilation. Handle product only in closed system or provide appropriate exhaust ventilation at machinery. Use a local exhaust ventilation.

**Advice on safe handling**

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not subject to grinding, shock or friction. Wash hands and face thoroughly after handling.

**Avoidance of contact**

Oxidizing agents, Reducing agents, Strong acids, Strong bases

**Storage****Conditions for safe storage**

Keep container tightly closed. Store in a refrigerator. Keep in a well-ventilated place. Protect from moisture. Keep under inert gas. Store locked up.

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## SECTION 8: Exposure controls/personal protection

**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

**Engineering measures**

Install a closed system or local exhaust.

Also install safety shower and eye bath.

**Personal protective equipment****Respiratory protection**

Gas mask

Self-contained breathing apparatus

**Eye/face protection**

Safety glasses

Safety goggles

Face-shield

**Skin and body protection**

Impervious protective clothing

**Hand protection**

Impervious gloves \*Use personal protective equipment(PPE) approved under appropriate government standards and follow local and national regulations.

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## SECTION 9: Physical and chemical properties

**Information on basic physicochemical properties**

liquid

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**Color**

colorless - yellow

**Odor**

No data available

**Odor Threshold**

No data available

**pH**

No data available

**Melting point/freezing point**

No data available

**Boiling point/boiling range**

164 °C

**Flash point**

71 °C

**Evaporation rate**

No data available

**Flammability**

No data available

**Upper explosion limit / Upper flammability limit**

No data available

**Lower explosion limit / Lower flammability limit**

No data available

**Vapor pressure**

5.3 kPa (80 °C)

**Relative vapor density**

2.42

**Relative density**

0.89

**Solubility(ies)**

Chloroform (Sparingly), Hexane (Slightly)

**Water solubility**

No data available

### **Solubility in other solvents**

soluble Solvent: Ether soluble Solvent: Alcohol soluble Solvent: Acetone

### **Partition coefficient: n-octanol/water**

No data available

### **Autoignition temperature**

No data available

### **Decomposition temperature**

No data available

### **Viscosity**

#### **Viscosity, dynamic**

No data available

#### **Viscosity, kinematic**

No data available

### **Molecular weight**

70.10 g/mol

### **Physical state**

Liquid

### **Dielectric constant**

37.229999999999997

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## SECTION 10: Stability and reactivity

### **Reactivity**

No data available

### **Chemical stability**

Stable under normal conditions.

### **Possibility of hazardous reactions**

None under normal processing.

### **Conditions to avoid**

Heat. Electrical spark Open flame Exposure to moisture.

### **Incompatible materials**

Oxidizing agents, Reducing agents, Strong acids, Strong bases

### **Hazardous decomposition products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>)

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## **SECTION 11: Toxicological information**

### **Acute toxicity**

#### **Product**

#### **Acute oral toxicity**

Assessment: The component/mixture is toxic after single ingestion.

#### **Acute inhalation toxicity**

Assessment: The component/mixture is moderately toxic after short term inhalation.

#### **Acute dermal toxicity**

Assessment: The component/mixture is highly toxic after single contact with skin.

### **Components**

#### **Dimethylcyanamide**

#### **Acute oral toxicity**

LD50 (Rat): 146 mg/kg Assessment: The component/mixture is toxic after single ingestion.

#### **Acute inhalation toxicity**

Assessment: The component/mixture is moderately toxic after short term inhalation.

#### **Acute dermal toxicity**

LD50 (Mouse): 125 mg/kg Assessment: The component/mixture is highly toxic after single contact with skin.

#### **Acute toxicity (other routes of administration)**

LD50 (Mouse): 40 mg/kg Application Route: Intraperitoneal injection

#### **Skin corrosion/irritation**

Classified based on available data. For more details, see section 2.

#### **Serious eye damage/eye irritation**

Classified based on available data. For more details, see section 2.

#### **Respiratory or skin sensitization**

Classified based on available data. For more details, see section 2.

#### **Germ cell mutagenicity**

Classified based on available data. For more details, see section 2.

### **Carcinogenicity**

Classified based on available data. For more details, see section 2.

### **Reproductive toxicity**

Classified based on available data. For more details, see section 2.

### **STOT-single exposure**

Classified based on available data. For more details, see section 2.

### **STOT-repeated exposure**

Classified based on available data. For more details, see section 2.

### **Repeated dose toxicity**

Classified based on available data. For more details, see section 2.

### **Aspiration toxicity**

Classified based on available data. For more details, see section 2.

### **RTECS No.**

GS6475000 (Dimethylcyanamide)

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## SECTION 12: Ecological information

### **Ecotoxicity**

No data available

### **Persistence and degradability**

No data available

### **Bioaccumulative potential**

No data available

### **Mobility in soil**

No data available

### **Other adverse effects**

No data available

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## SECTION 13: Disposal considerations

### **Disposal methods**

**Waste from residues**

Disposal in accordance with local and national regulations. Take precautions against ignition or explode. Entrust disposal to a licensed waste disposal company.

**Contaminated packaging**

Disposal in accordance with local and national regulations. Before disposal of used container, remove contents completely.

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## SECTION 14: Transport information

**International Regulations****IATA-DGR****UN/ID No.**

UN 2810

**Proper shipping name**

Toxic liquid, organic, n.o.s.

**Class**

6.1

**Packing group**

II

**IMDG-Code****UN number**

UN 2810

**Proper shipping name**

TOXIC LIQUID, ORGANIC, N.O.S.

**Class**

6.1

**Packing group**

II

**EmS Code**

F-A, S-A

**Domestic regulation****GB 6944/12268****UN number**

UN 2810

**Proper shipping name**

TOXIC LIQUID, ORGANIC, N.O.S.

**Class**

6.1

**Packing group**

II

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## SECTION 15: Regulatory information

### Measures on the Environmental Administration of New Chemical Substances Registration

#### Registration/Notification number

B1A232214757

Downstream users need to comply with the conditions of safe use of the chemical, understand the environmental and health hazard and risk management measures identified on the SDS as well as the local/national regulations concerning the chemical.

### The ingredients of this product are reported in the following inventories

#### CH BAGREG

On the inventory, or in compliance with the inventory

#### TSCA

Substance(s) not active on TSCA inventory

#### AICS

Not in compliance with the inventory

#### DSL

None of the components of this product are on the Canadian DSL, but all are on the NDSL

Dimethylcyanamide

#### ENCS

Not in compliance with the inventory

#### ISHL

Not in compliance with the inventory

#### KECI

Not in compliance with the inventory

#### PICCS

On the inventory, or in compliance with the inventory

#### IECSC

Not in compliance with the inventory

#### NZIoC

On the inventory, or in compliance with the inventory

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## SECTION 16: Other information

### Abbreviations and acronyms

CAS: Chemical Abstracts Service

TWA: Time-Weighted Average

STEL: Short-Term Exposure Limit

LD50: Lethal Dose 50%

LC50: Lethal Concentration 50%

EC50: Effective Concentration 50%

PEL: Permissible Exposure Limit

TLV: Threshold Limit Value

IMDG: International Maritime Dangerous Goods Code

IATA: International Air Transport Association

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

DOT: US Department of Transportation

NFPA: National Fire Protection Association

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

**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.