

## Chemical Safety Data Sheet MSDS / SDS

**N-METHYL METHACRYLAMIDE**

Revision Date:2026-03-20 Revision Number:1

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

Product name : N-METHYL METHACRYLAMIDE  
CBnumber : CB6299767  
CAS : 3887-02-3  
EINECS Number : 223-428-1  
Synonyms : N-METHYL METHACRYLAMIDE

**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

Warning

**Precautionary statements**

P264 Wash skin thoroughly after handling.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: wash with plenty of soap and water.  
P337+P313 IF eye irritation persists: Get medical advice/attention.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuerinsing.  
P332+P313 IF SKIN irritation occurs: Get medical advice/attention.

**Hazard statements**

H315 Causes skin irritation  
H319 Causes serious eye irritation

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## SECTION 3: Composition/information on ingredients

### Substance

Product name	: N-METHYL METHACRYLAMIDE
Synonyms	: N-METHYL METHACRYLAMIDE
CAS	: 3887-02-3
EC number	: 223-428-1
MF	: C <sub>5</sub> H <sub>9</sub> NO
MW	: 99.13

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## SECTION 4: First aid measures

### If inhaled

Remove person to fresh air and keep comfortable for breathing. Get medical advice/ attention if you feel unwell.

### In case of skin contact

Take off all contaminated clothing immediately. If on skin, rinse well with water. If skin irritation or rash occurs: Get medical advice/ attention.

### In case of eye contact

Rinse with plenty of water. If easy to do, remove contact lens, if worn. If eye irritation persists: Get medical advice/ attention.

### If swallowed

Get medical advice/ attention. 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. Cool closed containers exposed to fire with water spray. Remove undamaged containers from fire area if it is safe to do so.

### Special protective equipment for fire-fighters

Use personal protective equipment.

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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.

#### Local/Total ventilation

Ensure adequate ventilation. Use a local exhaust ventilation.

#### Advice on safe handling

Avoid contact with skin, eyes and clothing. Wear personal protective equipment. Wash hands and face thoroughly after handling.

#### Avoidance of contact

Oxidizing agents

### Storage

#### Conditions for safe storage

Keep container tightly closed. Store in a refrigerator.

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## SECTION 8: Exposure controls/personal protection

### Ingredients with workplace control parameters

Components	CAS RN	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Hydroquinone	123-31-9	PC-TWA	1 mg/m <sup>3</sup>	CN OEL
		PC-STEL	2 mg/m <sup>3</sup>	CN OEL
		TWA	1 mg/m <sup>3</sup>	ACGIH

Components CAS RN Value type Control parameters Basis (Form of exposure / Permissible concentration)

Hydroquinone 123-31-9 PC-TWA 1 mg/m<sup>3</sup> CN OEL

PC-STEL 2 mg/m<sup>3</sup> CN OEL

TWA 1 mg/m<sup>3</sup> ACGIH

## Engineering measures

Install a closed system or local exhaust.

Also install safety shower and eye bath.

## Personal protective equipment

### Respiratory protection

Gas mask

### Eye/face protection

Safety glasses

Face-shield

### Skin and body protection

Protective suit

### Hand protection

Protective 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

110 °C (13 hPa)

### Flash point

No data available

### 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**

No data available

**Relative density**

0.97

**Solubility(ies)****Water solubility**

No data available

**Solubility in other solvents**

No data available

**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**

99.13 g/mol

**Physical state**

clear liquid

## SECTION 10: Stability and reactivity

### Reactivity

No data available

### Chemical stability

Polymerization may occur under the influences of heat, light or on contact with polymerization initiators such as peroxides etc.

### Possibility of hazardous reactions

None under normal processing.

### Conditions to avoid

Heat. Exposure to light.

### Incompatible materials

Oxidizing agents

### 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

### Components

### Hydroquinone

### Acute oral toxicity

LDLo (Humans): 29 mg/kg Assessment: The component/mixture is moderately toxic after single ingestion.

### LD50 (Rat)

302 mg/kg

### Acute dermal toxicity

LD50 (Rabbit): > 2,000 mg/kg Assessment: The substance or mixture has no acute dermal toxicity

### Acute toxicity (other routes of administration)

LD50 (Rat): 170 mg/kg Application Route: Intraperitoneal injection

### Skin corrosion/irritation

### Components

### Hydroquinone

**Result**

Skin irritation

**Serious eye damage/eye irritation****Components****Hydroquinone****Result**

Irreversible effects on the eye

**Respiratory or skin sensitization****Components****Hydroquinone****Assessment**

May cause sensitization by skin contact.

**Germ cell mutagenicity****Components****Hydroquinone****Germ cell mutagenicity - Assessment**

Presumed to induce heritable mutations in the germ cells of humans.

**Carcinogenicity****Components****Hydroquinone****Carcinogenicity - Assessment**

Suspected human carcinogens

**Reproductive toxicity**

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

**STOT-single exposure****Components****Hydroquinone**

## Target Organs

Kidney, Central nervous system

## Assessment

Causes damage to organs.

## STOT-repeated exposure

## Components

## Hydroquinone

## Target Organs

Blood, Respiratory system

## Assessment

Causes damage to organs through prolonged or repeated exposure.

## Target Organs

Liver, Kidney, Central nervous system

## Assessment

May cause damage to organs through prolonged or repeated exposure.

## 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.

MX3500000 (Hydroquinone)

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## SECTION 12: Ecological information

### Ecotoxicity

#### Components:

#### Hydroquinone:

##### Toxicity to fish

LC50 (Oncorhynchus mykiss (rainbow trout)): 0.044 mg/l Exposure time: 96 h

##### Toxicity to daphnia and other aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 0.061 mg/l Exposure time: 48 h

### **Toxicity to algae/aquatic plants**

EC50 (Selenastrum capricornutum (green algae)): 0.053 mg/l Exposure time: 72 h

### **Ecotoxicology Assessment**

#### **Acute aquatic toxicity**

Very toxic to aquatic life.

#### **Chronic aquatic toxicity**

Very toxic to aquatic life with long lasting effects.

#### **Persistence and degradability**

No data available

#### **Bioaccumulative potential**

#### **Components:**

##### **Hydroquinone:**

octanol/water

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

0.59

#### **Mobility in soil**

#### **Components:**

##### **Hydroquinone:**

tal compartments

##### **Distribution among environmental compartments**

Koc: 240

#### **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. 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.**

Not applicable

**Proper shipping name**

Not applicable

**Class**

Not applicable

**Subsidiary risk**

Not applicable

**Packing group**

Not applicable

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

Not applicable

**Proper shipping name**

Not applicable

**Class**

Not applicable

**Subsidiary risk**

Not applicable

**Packing group**

Not applicable

**EmS Code**

Not applicable

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

Not applicable

**Proper shipping name**

Not applicable

**Class**

Not applicable

**Subsidiary risk**

Not applicable

**Packing group**

Not applicable

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**SECTION 15: Regulatory information**

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

### Registration/Notification number

B1A232215005

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 listed on TSCA inventory

#### AICS

Not in compliance with the inventory

#### DSL

This product contains the following components that are not on the Canadian DSL nor NDSL.

N-Methylmethacrylamide

#### ENCS

Not in compliance with the inventory

#### ISHL

Not in compliance with the inventory

#### KECI

Not in compliance with the inventory

#### PICCS

Not in compliance with the inventory

#### IECSC

Not in compliance with the inventory

#### NZIoC

Not 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.