

# SDS

## SAFETY DATA SHEET

Oakwood Products, Inc  
730 Columbia HWY N  
Estill, SC 29918  
[www.oakwoodchemical.com](http://www.oakwoodchemical.com)

**Phone Numbers:**

Product Information	803-739-8800
Transportation Emergency	800-451-8346
Outside the USA	760-602-8700

### MATERIAL IDENTIFICATION

NAME: 1,2-Dimethylhydrazine  
CAS#: [540-73-8]  
CAT#: 371949  
For R&D use only.

### HAZARDS IDENTIFICATION

**GHS Classification**

Flammable liquids (Category 1)  
Acute toxicity, oral (Category 2)  
Acute toxicity, dermal (Category 4)  
Serious eye damage/eye irritation (Category 1)  
Acute toxicity, inhalation (Category 3)  
Respiratory tract irritation (Category 3)  
Carcinogenicity (Category 1B)  
Hazardous to the aquatic environment, long-term hazard (Category 4)

**GHS Label elements, including precautionary statements****Pictograms****Signal Word**

Danger

**Hazard Statement(s)**

H224	Extremely flammable liquid and vapour
H300	Fatal if swallowed
H312	Harmful in contact with skin
H318	Causes serious eye damage
H331	Toxic if inhaled
H335	May cause respiratory irritation
H350	May cause cancer
H413	May cause long lasting harmful effects to aquatic life

## Precautionary Statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352	IF ON SKIN: wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P309 + P311	IF exposed or if you feel unwell: call a POISON CENTER or doctor/physician.
P311	Call a POISON CENTER or doctor/physician.

## COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms	: N,N'-Dimethylhydrazine, Hydrazomethane, sym-Dimethylhydrazine, SDMH
Formula	: C <sub>2</sub> H <sub>8</sub> N <sub>2</sub>
Molecular Weight	: 60.10 g/mol

CAS	Description	Concentration
540-73-8	1,2-Dimethylhydrazine	95%

## FIRST AID MEASURES

**In case of eye contact**

Immediately flush eyes with running water for at least 15 minutes while keeping eyes open. Seek medical attention.

**In case of skin contact**

Wash thoroughly with soap and plenty of water. Seek medical attention.

**If inhaled**

Remove victim from source of exposure to fresh air. If breathing is difficult, administer oxygen. Seek medical attention.

**If swallowed**

Do not induce vomiting. Give water to victim to drink. Seek medical attention.

## FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

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

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Unusual fire and explosion hazards/decomposition of product**

emits toxic fumes under fire conditions.

---

## ACCIDENTAL RELEASE MEASURES

### Personal precautions

Use personal protective equipment. Avoid breathing fumes, vapors, mists or gas. Ventilate area. Remove all sources of ignition. Evacuate personnel.

### Environmental precautions

Prevent further leakage if safe to do so.

### Methods and materials for containment and clean up

Absorb spills on sand or vermiculite and place in closed container for disposal.

---

## HANDLING AND STORAGE

### Precautions for safe handling

Avoid prolonged use. Avoid all direct contact with material. Do not breathe dust or vapor. Wash thoroughly after handling.

### Precautions for safe storage

Keep container tightly closed. Store in a cool, dry, well-ventilated area.

Hygroscopic

A harmful contamination of the air can be reached very quickly on evaporation of this substance at 20°C.

---

## EXPOSURE CONTROL/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

#### Eye/face protection

Wear protective safety goggles or face shields tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Hand/skin protection

Avoid all direct contact with product.

Wear chemical-resistant gloves.

Wear protective clothing and boots.

After contact with skin, wash immediately.

#### Respiratory protection

Ensure adequate ventilation during use. Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the exposure limits.

---

## PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Odour	Stench
Odour Threshold	no data available
Melting point/Freezing Point	-9°C
Boiling Point	81°C

Flash Point	<5°C-closed cup
Evaporation Rate	no data available
Flammability (solid, gas)	no data available
Upper/Lower Flammability or Explosive limits	no data available
Vapour pressure	no data available
Relative Density	0.83
Solubility(ies)	no data available
Partition coefficient: n-octanol/water	no data available
Auto-ignition temperature	no data available
Decomposition temperature	no data available
Viscosity	no data available
Refractive Index	no data available

---

## STABILITY AND REACTIVITY

### 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 and strong acids.

### Hazardous decomposition products

May evolve carbon monoxide, carbon dioxide, and nitrogen oxides.

---

## TOXICOLOGICAL INFORMATION

### Acute toxicity

#### Oral LD50

Rat - 100 mg/kg

Mouse - 36 mg/kg

#### Intraperitoneal LD50

Rat - 163 mg/kg

#### Intravenous LD50

Rat - 176 mg/kg

### Other information on acute toxicity

Inhalation LCLo Rat - 280 ppm/4H

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

Causes serious eye damage

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

May cause cancer

**Reproductive toxicity**

no data available

**STOT-single exposure**

May cause respiratory irritation

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

**Exposure Routes**

Harmful to skin, eyes, and respiratory system.

May be toxic if inhaled or swallowed.

**Signs and Symptoms of Exposure**

Cough. Sore throat

**Additional Information**

RTECS: MV2625000

To the best of our knowledge, the health hazards of this material have not been fully investigated.

---

**ECOLOGICAL INFORMATION****Toxicity**

no data available

**Persistence and degradability**

no data available

**Bioaccumulative potential**

no data available

**Mobility in soil**

no data available

**PBT and vPvB assessment**

no data available

**Other adverse effects**

no data available

---

**DISPOSAL CONSIDERATIONS**

Dissolve in or mix the material with a combustible solvent and burn in a chemical incinerator equipped

with an afterburner and scrubber. Observe all Federal, State and local laws.

---

## TRANSPORT INFORMATION

### **DOT**

Dimethylhydrazine, symmetrical

6.1, 3

UN2382 I

Inhalation Zone B

Reportable Quantity (RQ): 1 lbs

### **IMDG**

Dimethylhydrazine, symmetrical

6.1, 3

UN2382

Inhalation Zone B

### **IATA**

Dimethylhydrazine, symmetrical

6.1, 3

UN2382

Inhalation Zone B

IATA Passenger: Forbidden for transport

IATA Cargo: Forbidden for transport

---

## REGULATORY INFORMATION

### **SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

### **SARA 313 Components**

SARA 313: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

### **New Jersey Right to Know Components**

This product contains a chemical on the New Jersey Right to Know Components List.

	<b>CAS</b>
1,2-Dimethylhydrazine	540-73-8

### **California Prop. 65 Components**

WARNING! This product contains a chemical known to the State of California to cause cancer, birth defects, or any other reproductive harm.

	<b>CAS</b>
1,2-Dimethylhydrazine	540-73-8

---

## OTHER INFORMATION

Version : 1.2

Revision Date : 2/2/2016

The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. Oakwood shall not be held liable for any damage resulting from handling or from

contact with the above product.