### MSDS for Methylhydrazine, 98%



Material Safety Data Sheet Methylhydrazine, 98%

#### **Section 1 - Chemical Product and Company Identification**

**MSDS Name:** Methylhydrazine, 98%

**Catalog Numbers:** 12695-0000, 12695-0100, 12695-1000

**Synonyms:** 

**Company Identification:** Acros Organics BVBA

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

**Company Identification: (USA)** Acros Organics

One Reagent Lane Fair Lawn, NJ 07410

For information in the US, call: 800-ACROS-01
For information in Europe, call: +32 14 57 52 11
Emergency Number, Europe: +32 14 57 52 99
Emergency Number US: 201-796-7100
CHEMTREC Phone Number, US: 800-424-9300
CHEMTREC Phone Number, Europe: 703-527-3887

#### Section 2 - Composition, Information on Ingredients

**CAS# Chemical Name: % EINECS#** 60-34-4 Methylhydrazine 98% 200-471-4

**Hazard Symbols:** T F





**Risk Phrases:** 45 11 23/24/25

## **Section 3 - Hazards Identification EMERGENCY OVERVIEW**

Highly flammable. Toxic by inhalation, in contact with skin and if swallowed. May cause cancer. Hygroscopic (absorbs moisture from the air).

#### **Potential Health Effects**

**Eye:** May cause eye irritation.

**Skin:** May cause skin irritation. Toxic in contact with skin.

**Ingestion:** Poison by ingestion.

**Inhalation:** May cause respiratory tract irritation. Toxic if inhaled.

**Chronic:** May cause cancer in humans.

**Section 4 - First Aid Measures** 

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes,

occasionally lifting the upper and lower eyelids.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing

contaminated clothing and shoes.

**Ingestion:** Do NOT induce vomiting. If conscious and alert, rinse mouth and drink

2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately.

Notes to Physician:

**Section 5 - Fire Fighting Measures** 

**General** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective

ernand, Monay Moort (approved or equivalenc), and full

gear.

Extinguishing

In case of fire, use water, dry chemical, chemical foam, or alcohol-

**Media:** resistant foam.

**Section 6 - Accidental Release Measures** 

**General** Use proper personal protective equipment as indicated in Section 8.

**Information:** 

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then

place in suitable container.

**Section 7 - Handling and Storage** 

Handling: Use spark-proof tools and explosion proof equipment. Do not breathe dust,

vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a

chemical fume hood.

**Storage:** Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly

closed container. Flammables-area.

**Section 8 - Exposure Controls, Personal Protection** 

**Engineering Controls:** 

Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits** 

CAS# 60-34-4:

United States OSHA: ; 0.2 ppm Ceiling; 0.35 mg/m3

Ceiling

Belgium - TWA: 0.01 ppm VLE; 0.019 mg/m3 VLE

France - VME: 0.2 ppm VME; 0.35 mg/m3 VME

Malaysia: 0.01 ppm TWA; 0.019 mg/m3 TWA

Spain: 0.01 ppm VLA-ED; 0.019 mg/m3 VLA-ED

**Personal Protective Equipment** 

**Eyes:** Wear safety glasses and chemical goggles if splashing is possible. **Skin:** Wear safety glasses and chemical goggles if splashing is possible. **Clothing:** Wear appropriate protective clothing to minimize contact with skin.

Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece

airline respirator in the positive pressure mode with emergency escape

provisions.

**Section 9 - Physical and Chemical Properties** 

Physical State: Clear liquid

**Color:** colorless - faint yellow

Odor: Not available pH: Not available

Vapor Pressure: 48 mbar @ 20 C Viscosity: Not available

**Boiling Point:** 87 deg C @ 760.00mm Hg ( 188.60癋)

Freezing/Melting Point: -21 deg C ( -5.80癋)

**Autoignition Temperature:** 196 deg C ( 384.80 deg F)

**Flash Point:** 21 deg C ( 69.80 deg F)

Explosion Limits: Lower: 2.50 vol %
Explosion Limits: Upper: 97.00 vol %
Decomposition Temperature: Not available
Solubility in water: soluble in water

Specific Gravity/Density: .8660g/cm3
Molecular Formula: CH3NHNH2
Molecular Weight: 46.06

**Section 10 - Stability and Reactivity** 

**Chemical Stability:** Stable under normal temperatures and pressures.

**Conditions to Avoid:** Incompatible materials.

**Incompatibilities with Other** Incompatible materials, peroxides, oxygen.

**Materials** 

Hazardous Decomposition Nitrogen oxides, carbon monoxide, carbon dioxide,

**Products** nitrogen.

**Hazardous Polymerization** Has not been reported.

**Section 11 - Toxicological Information** 

**RTECS#:** CAS# 60-34-4: MV5600000

LD50/LC50: RTECS:

**CAS# 60-34-4:** Dermal, guinea pig: LD50 = 48 mg/kg;

Inhalation, mouse: LC50 = 56 ppm/4H; Inhalation, rat: LC50 = 34 ppm/4H; Oral, mouse: LD50 = 29 mg/kg; Oral, rat: LD50 = 32 mg/kg; Skin, rabbit: LD50 = 95 mg/kg; Skin, rat: LD50 = 183 mg/kg;

.

Carcinogenicity: Methylhydrazine - ACGIH: A3 - Confirmed animal carcinogen with

unknown relevance to humans California: carcinogen, initial date 7/1/92

**Other:** See actual entry in RTECS for complete information. The toxicological

properties have not been fully investigated.

**Section 12 - Ecological Information** 

Not available

#### **Section 13 - Disposal Considerations**

Dispose of in a manner consistent with federal, state, and local regulations.

#### **Section 14 - Transport Information**

	IATA	IMO	RID/ADR
Shipping	METHYLHYDRAZINE (forbidden	METHYLHYDRAZINE METHYLHYDRAZINE	
Name:	to ship via passenger or cargo		
	air)		
Hazard	6.1 (3)	6.1 (3)	6.1 (3)
Class:			
UN	1244	1244	1244
Number:			
<b>Packing</b>	I	I	I
Group:			

**USA Toxic Inhalation Hazard** 

USA RQ: CAS# 60-34-4: 10 lb final RQ; 4.54 kg final RQ

#### **Section 15 - Regulatory Information**

**European/International Regulations** 

European Labeling in Accordance with EC Directives

Hazard Symbols: T F

Risk Phrases:

R 45 May cause cancer.

R 11 Highly flammable.

R 23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

#### Safety Phrases:

- S 53 Avoid exposure obtain special instructions before use.
- S 16 Keep away from sources of ignition No smoking.
- S 24/25 Avoid contact with skin and eyes.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 60-34-4: Not available

Canada

CAS# 60-34-4 is listed on Canada's NDSL List

#### **US Federal**

**TSCA** 

CAS# 60-34-4 is listed on the TSCA Inventory.

# Section 16 - Other Information MSDS Creation Date: 7/16/1996 Revision #0 Date Original.

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Page 4 of 4