

Health	2
Fire	3
Reactivity	0
Personal Protection	Н

# Material Safety Data Sheet N,N-Dimethylformamide Dimethyl Acetal MSDS

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

Product Name: N,N-Dimethylformamide Dimethyl Acetal

Catalog Codes: SLD2572

CAS#: 4637-24-5

RTECS: Not available.

TSCA: TSCA 8(b) inventory: N,N-Dimethylformamide

Dimethyl Acetal

CI#: Not available.

**Synonym:** DMF-DMA;

Chemical Name: 1,1-Dimethoxytrimethylamine

Chemical Formula: Not available.

**Contact Information:** 

Sciencelab.com, Inc. 14025 Smith Rd. Houston, Texas 77396

US Sales: 1-800-901-7247

International Sales: 1-281-441-4400

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call:

1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

# **Section 2: Composition and Information on Ingredients**

## Composition:

Name	CAS#	% by Weight
{N,N-}Dimethylformamide Dimethyl Acetal	4637-24-5	100

Toxicological Data on Ingredients: N,N-Dimethylformamide Dimethyl Acetal LD50: Not available. LC50: Not available.

## **Section 3: Hazards Identification**

Potential Acute Health Effects: Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation.

## **Potential Chronic Health Effects:**

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

## **Section 4: First Aid Measures**

## **Eye Contact:**

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

#### **Skin Contact:**

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

#### **Serious Skin Contact:**

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

#### Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

## Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

## **Section 5: Fire and Explosion Data**

Flammability of the Product: Flammable.

**Auto-Ignition Temperature:** Not available.

Flash Points: CLOSED CUP: 6.1111°C (43°F).

Flammable Limits: Not available.

Products of Combustion: Not available.

## Fire Hazards in Presence of Various Substances:

Highly flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

#### **Explosion Hazards in Presence of Various Substances:**

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

#### **Fire Fighting Media and Instructions:**

Flammable liquid. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

## Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal.

#### Large Spill

Flammable liquid. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.

# **Section 7: Handling and Storage**

## **Precautions:**

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, acids.

## Storage:

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

# **Section 8: Exposure Controls/Personal Protection**

## **Engineering Controls:**

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

#### **Personal Protection:**

Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

#### Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

**Exposure Limits:** Not available.

## **Section 9: Physical and Chemical Properties**

Physical state and appearance: Liquid.

Odor: Odorless.

Taste: Not available.

Molecular Weight: 11.16 g/mole

Color: Clear Colorless.

pH (1% soln/water): Not available.

Boiling Point: 102°C (215.6°F)

Melting Point: Not available.

**Critical Temperature:** Not available. **Specific Gravity:** 0.894 (Water = 1)

Vapor Pressure: Not available.
Vapor Density: Not available.

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available.

**Solubility:** Hydrolyzed with water.

## Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Heat, ignition sources (flames, sparks, static), incompatible materials, water, moisture

Incompatibility with various substances: Reactive with oxidizing agents, acids.

Corrosivity: Not available.

Special Remarks on Reactivity: Moisture sensitive

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

# **Section 11: Toxicological Information**

Routes of Entry: Absorbed through skin. Eye contact.

**Toxicity to Animals:** 

LD50: Not available. LC50: Not available.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

**Special Remarks on other Toxic Effects on Humans:** 

Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation. Inhalation: Vapor or mist causes respiratory tract irritation. Ingestion: No information found. May be harmful if swallowed. The toxicological properites of this substance have not been fully investigated.

## Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: Not available.

Special Remarks on the Products of Biodegradation: Not available.

## **Section 13: Disposal Considerations**

## Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

## **Section 14: Transport Information**

DOT Classification: CLASS 3: Flammable liquid.

Identification: : FLAMMABLE LIQUIDS, N.O.S.(N,N-Dimethylformamide dimethyl acetal) UNNA: 1993 PG: II

## **Section 15: Other Regulatory Information**

Federal and State Regulations: TSCA 8(b) inventory: N,N-Dimethylformamide Dimethyl Acetal

## Other Regulations:

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

#### Other Classifications:

WHMIS (Canada): CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).

## DSCL (EEC):

R11- Highly flammable. R36/37/38- Irritating to eyes, respiratory system and skin. S9- Keep container in a well-ventilated place. S16- Keep away from sources of ignition - No smoking. S24/25- Avoid contact with skin and eyes. S33- Take precautionary measures against static discharges. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.

## HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 3

Reactivity: 0

Personal Protection: h

## National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 4

Reactivity: 0

Specific hazard:

## **Protective Equipment:**

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

## **Section 16: Other Information**

References: Not available.

Other Special Considerations: Not available.

Created: 10/09/2005 05:12 PM

Last Updated: 11/01/2010 12:00 PM

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