

# SAFETY DATA SHEET

Creation Date 04-Jun-2010

Revision Date 19-Dec-2025

Revision Number 6

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

## 1. Identification

**Product Name** N,N-Dimethylacetamide dimethyl acetal

**Cat No. :** AC264130000; AC264130050; AC264130250; AC264131000

**CAS No** 18871-66-4

**Synonyms** 1,1-Dimethoxy-N,N-dimethylethylamine

**Recommended Use** Laboratory chemicals.

**Uses advised against** Food, drug, pesticide or biocidal product use.

## Details of the supplier of the safety data sheet

### Company

Fisher Scientific Company

One Reagent Lane

Fair Lawn, NJ 07410

Tel: (201) 796-7100

Acros Organics

One Reagent Lane

Fair Lawn, NJ 07410

### Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **Europe** call: +32 14 57 52 11

Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99

**CHEMTREC** Tel. No. **US**:001-800-424-9300 / **Europe**:001-703-527-3887

## 2. Hazard(s) identification

### Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

Flammable liquids	Category 2
Acute oral toxicity	Category 4
Acute dermal toxicity	Category 4
Acute Inhalation Toxicity - Vapors	Category 4
Skin Corrosion/Irritation	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Respiratory system.	

## Label Elements

### Signal Word

Danger

**Hazard Statements**

Highly flammable liquid and vapor  
Causes skin irritation  
Causes serious eye irritation  
May cause respiratory irritation  
Harmful if swallowed, in contact with skin or if inhaled

**Precautionary Statements****Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Do not eat, drink or smoke when using this product  
Wear protective gloves/protective clothing/eye protection/face protection  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
Keep container tightly closed  
Ground and bond container and receiving equipment  
Use explosion-proof electrical/ventilating/lighting equipment  
Keep cool  
Take action to prevent static discharges  
Use non-sparking tools

**Inhalation**

IF INHALED: Remove person to fresh air and keep comfortable for breathing  
Call a POISON CENTER or doctor if you feel unwell

**Skin**

Call a POISON CENTER or doctor if you feel unwell  
If skin irritation occurs: Get medical advice/attention  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
Take off contaminated clothing and wash before reuse

**Eyes**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
If eye irritation persists: Get medical advice/attention

**Ingestion**

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell  
Rinse mouth

**Fire**

In case of fire: Use CO<sub>2</sub>, dry chemical, or foam to extinguish

**Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

None identified

**Hazards classified under paragraph (d)(1)(ii) of 1910.1200**

No information available

### 3. Composition/information on Ingredients

Component	CAS No	Weight %
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	>95

### 4. First-aid measures

<b>Eye Contact</b>	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is required. Take off contaminated clothing and shoes immediately.
<b>Inhalation</b>	Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.
<b>Ingestion</b>	Do NOT induce vomiting. Call a physician immediately.
<b>Most important symptoms and effects</b>	Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting
<b>Notes to Physician</b>	Treat symptomatically

### 5. Fire-fighting measures

<b>Suitable Extinguishing Media</b>	Water spray, carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.
<b>Unsuitable Extinguishing Media</b>	No information available
<b>Flash Point</b>	8 °C / 46.4 °F
<b>Method -</b>	No information available
<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
Upper	No data available
Lower	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

#### Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

#### Hazardous Combustion Products

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

#### Protective Equipment and Precautions for Firefighters

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

#### NFPA

Health	Flammability	Instability	Physical hazards
2	3	0	N/A

### 6. Accidental release measures

<b>Personal Precautions</b>	Remove all sources of ignition. Take precautionary measures against static discharges.
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**Environmental Precautions** See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

## 7. Handling and Storage

<b>Handling</b>	Do not breathe mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not ingest. If swallowed then seek immediate medical assistance. Handle product only in closed system or provide appropriate exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.
<b>Storage.</b>	Keep in a dry, cool and well-ventilated place. Keep container tightly closed. Keep away from heat, sparks and flame. Flammables area. Incompatible Materials. Acids. Strong oxidizing agents.

## 8. Exposure controls / personal protection

**Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limit established by the region specific regulatory bodies.

**Engineering Measures** Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

### Personal Protective Equipment

<b>Eye/face Protection</b>	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
<b>Skin and body protection</b>	Wear appropriate protective gloves and clothing to prevent skin exposure.
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.
<b>Hygiene Measures</b>	Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

### Appearance

<u>Physical State</u>	Liquid	<u>Remarks</u>	<u>Method</u>
<u>Color</u>	Dark yellow		
<u>Odor</u>	No information available		
<u>Odor Threshold</u>	No information available		
<u>Property</u>	<u>Values</u>		
<u>Melting Point/Range</u>	No data available		
<u>Softening Point</u>	No data available		
<u>Boiling Point/Range</u>	110 - 118 °C / 230 - 244.4 °F	@ 760 mmHg	
<u>Flash Point</u>	8 °C / 46.4 °F	<b>Method</b> - No information available	
<u>Flammability (liquid)</u>	Highly flammable	On basis of test data	
<u>Flammability (solid,gas)</u>	Not applicable	Liquid	
<u>Explosion Limits</u>	No data available		

Autoignition Temperature	No data available
Decomposition Temperature	No data available
pH	No data available
Viscosity	No data available
Water Solubility	No information available
Solubility in other solvents	No information available
Partition Coefficient (n-octanol/water)	
Component	<b>log Pow</b>
1,1-Dimethoxyethyl(dimethyl)amine	0.922
Vapor Pressure	No data available
Density / Specific Gravity	0.911
Bulk Density	Not applicable
Vapor Density	No data available
Particle characteristics	Liquid (Air = 1.0) Not applicable (liquid)

**Other Information**

Molecular Formula	C6 H15 N O2
Molecular Weight	133.19
Explosive Properties	Vapors may form explosive mixtures with air

**10. Stability and reactivity**

Reactive Hazard	None known, based on information available
Stability	Moisture sensitive.
Conditions to Avoid	Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Exposure to moist air or water.
Incompatible Materials	Acids, Strong oxidizing agents
Hazardous Decomposition Products	Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> )
Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

**11. Toxicological information****Information on expected route of exposure**

Inhalation	Not an expected route of exposure.
Ingestion	May be harmful if swallowed.
Eyes	Irritating to eyes. Avoid contact with eyes.
Skin	May cause irritation. Avoid contact with skin. Harmful in contact with skin.

**Toxicology data for the components**

<b>Toxicologically Synergistic Products</b>	No information available
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(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

**(d) respiratory or skin sensitization;**

Respiratory	No data available
Skin	No data available

**(e) germ cell mutagenicity;** No data available**(f) carcinogenicity;**

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	Not listed				

**(g) reproductive toxicity;** No data available**(h) STOT-single exposure;** Category 3

Results / Target organs	Respiratory system.
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**(i) STOT-repeated exposure;** No data available

Target Organs	No information available.
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**(j) aspiration hazard;** No data available

Other Adverse Effects	The toxicological properties have not been fully investigated.
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Symptoms / effects,both acute and delayed	Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.
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Other Adverse Effects	The toxicological properties have not been fully investigated.
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Endocrine Disrupting Properties	This product does not contain any known or suspected endocrine disruptors.
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**12. Ecological information****Ecotoxicity**

Do not empty into drains.

Persistence and Degradability	Persistence is unlikely
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Bioaccumulation/ Accumulation	No information available.
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Mobility	No information available.
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Component	log Pow
1,1-Dimethoxyethyl(dimethyl)amine	0.922

**13. Disposal considerations**

Waste Disposal Methods	Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.
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**14. Transport information**

DOT

UN-No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s.
Technical Shipping Name	1,1-Dimethoxyethyl(dimethyl)amine
Hazard Class	3
Packing Group	II

TDG

UN-No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s.
Technical Shipping Name	1,1-Dimethoxyethyl(dimethyl)amine
Hazard Class	3
Packing Group	II

IATA

UN-No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s.
Technical Shipping Name	1,1-Dimethoxyethyl(dimethyl)amine
Hazard Class	3
Packing Group	II

IMDG/IMO

UN-No	UN1993
Proper Shipping Name	Flammable liquid, n.o.s.
Technical Shipping Name	1,1-Dimethoxyethyl(dimethyl)amine
Hazard Class	3
Packing Group	II

**15. Regulatory Information**United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	-	-	-

**Legend:**

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT)** Not applicable

**TSCA 12(b) - Notices of Export** Not applicable

International Inventories

Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	-	-	242-641-0	X	-		X	-	KE-11115

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations** Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH** Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	-	-	-

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	Not applicable	Not applicable	Not applicable	Not applicable

**Contains component(s) that meet a 'definition' of per & poly fluorooalkyl substance (PFAS)?**  
Not applicable

**Other International Regulations**

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
1,1-Dimethoxyethyl(dimethyl)amine	18871-66-4	Not applicable	Not applicable	Not applicable	Not applicable

**16. Other Information**

**Prepared By** Product stewardship (Regulatory Affairs)  
Thermo Fisher Scientific  
email - begel.sdsdesk@thermofisher.com

**Creation Date** 04-Jun-2010  
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**Revision Summary** Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**