



MATERIAL SAFETY DATA SHEET

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

1. IDENTIFICATION:

Product Code : 92014, 94097, 98171

Company Name : ADVENT CHEMBIO PRIVATE LIMITED

Address : W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE,
NAVI MUMBAI - 400 701, MAHARASHTRA, INDIA.

E-mail : sales@adventchembio.com

WEBSITE : www.adventchembio.com

Company Phone Number : +91 77770 84837

2. HAZARDS IDENTIFICATION:**Hazard classification****Physical hazards**

Flammable liquids : Category 2 (Highly flammable liquid and vapor.)

Health hazards

Acute toxicity : Category 4 (Harmful if inhaled.)

Skin irritation : Category 2 (Causes skin irritation.)

Reproductive toxicity : Category 1B (May damage fertility. May damage the unborn child.)

Labels elements :

Hazard symbol :



Signal word : Danger

Hazard statement : Highly flammable liquid and vapor.
Causes skin irritation.
Harmful if inhaled.
May damage fertility. May damage the unborn child.

Precautionary statement

Prevention : Obtain special instructions before use.
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood.
Wear protective gloves/ protective clothing/ eye protection/ face protection.
Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.
Keep container tightly closed. Ground/ bond container and receiving equipment.
Use explosion-proof electrical/ ventilating/ lighting/ equipment.
Use only non-sparking tools. Take precautionary measures against static discharge.

Response : IF exposed or concerned: Get medical advice/ attention.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/



MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

	shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF SWALLOWED: Immediately call a poison center or doctor/physician.
Storage	: Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Disposal	: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/ INFORMATION ON INGREDIENTS:

Ingredient	CAS Number	Percent	Hazardous
1,2-Dimethoxyethane	110-71-4	NLT 99.0%	Yes

4. FIRST AID MEASURES:

General information	: Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.
Ingestion	: Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms persist.
Inhalation	: Immediately flush with plenty of water for at least 15 minutes. Get medical attention.
Skin contact	: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.
Eye contact	: The most important known symptoms and effects are described in the labelling.
Most important symptoms/effects, acute and delayed	: No data available.
Indication of immediate medical attention and special treatment needed	

5. FIRE FIGHTING MEASURES:

General information	: Flammable liquid and vapor.
----------------------------	-------------------------------

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Water Foam Carbon dioxide (CO2) Dry powder.
Unsuitable extinguishing media	: For this substance/mixture no limitations of extinguishing agents are given.



MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

Specific hazards arising from the chemical : Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations. Vapor from the solvent may accumulate in container headspace resulting in flammability hazard. Heat may cause the containers to explode.

Special protective equipment and precautions for firefighters

Special firefighting procedures : Fight fire from a protected location. Move containers from fire area if you can do so without risk.

Special protective equipment for fire-fighters : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up : Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

Notification Procedures : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

Environmental precautions : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

7. HANDLING AND STORAGE:

Precautions for safe handling : Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

Conditions for safe storage, including any incompatibilities : Keep away from food, drink and animal feeding stuffs. Keep container tightly closed in a dry, well-ventilated place. Ground container and transfer equipment to eliminate static electric sparks.

8. EXPOSURE CONTROLS PERSONAL PROTECTION:

Appropriate engineering controls : No data available

Derived No Effect Level (DNEL) : **Ingredients with workplace control parameters:**



MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

Predicted No Effect Concentration (PNEC)		Application Area	Routes of exposure	Health effect	Value
		Workers	Inhalation	Long-term systemic effects	3,1 mg/m ³
		Workers	Skin contact	Long-term systemic effects	1,1mg/kg BW/d
		Consumers	Inhalation	Long-term systemic effects	1,5 mg/m ³
		Consumers	Skin contact	Long-term systemic effects	0,23mg/kg BW/d
		Consumers	Ingestion	Long-term systemic effects	0,23mg/kg BW/d
	Compartment			Value	
		Soil		1,39 mg/kg	
		Sea water		0,64 mg/l	
		Fresh water		6,4 mg/l	
		Sea sediment		2,57 mg/kg	
		Fresh water sediment		25,7 mg/kg	
		Onsite sewage treatment plant		20 mg/l	

Individual protection measures, such as personal protective equipment

General information	:	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.
Eye/face protection	:	Wear safety glasses with side shields (or goggles).
Hand protection	:	Chemical resistant gloves.
Other	:	Flame retardant antistatic protective clothing.
Respiratory protection	:	In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapor cartridge.
Hygiene measures	:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower. Avoid contact with eyes, skin, and clothing.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance	:	Clear, colorless liquid.
Odor	:	Ether-like
Solubility	:	No data available.
Formula	:	C ₄ H ₁₀ O ₂
Molecular Weight	:	90.12 g/mol



MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

Density	: 0.867 - 0.869 g at 25°C
pH	: 7 neutral.
% Volatiles by volume @ 21C (70F)	: No data available.
Boiling Point	: 85°C
Melting Point	: -58°C
Flash Point	: 5 °C
Vapor Density (Air=1)	: 3.11
Vapor Pressure (mm Hg)	: 87 hPa at 25 °C
Evaporation Rate (BuAc=1)	: No data available.

10. STABILITY AND REACTIVITY:

Reactivity	: Formation of peroxides possible. Vapors may form explosive mixture with air.
Chemical stability	: Material is stable under ambient conditions.
Possibility of hazardous reactions	: No data available.
Conditions to avoid	: Warming. Moisture.
Incompatible materials	: Oxidizing agents, Strong acids, and Strong oxidizing agents.
Hazardous decomposition products	: In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION:**Information on toxicological effects****Acute toxicity (list all possible routes of exposure)**

Oral Product	: LD 50 (Rat): female - 5.370 mg/kg
Dermal Product	: LD 50 Rat - female - > 5.000 mg/kg
Inhalation Product	: No data available.
Repeated dose toxicity Product	: No data available.
Skin corrosion/irritation Product	: Irritating to skin.
Serious eye damage/eye irritation Product	: No eye irritation.
Respiratory or skin sensitization Product	: Not a skin sensitizer.
Carcinogenicity Product	: This substance has no evidence of carcinogenic properties



MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans	:	No carcinogenic components identified.
US. National Toxicology Program (NTP) Report on Carcinogens	:	No carcinogenic components identified.
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	:	No carcinogenic components identified.
Germ cell mutagenicity	:	No data available.
Reproductive toxicity Product	:	May damage the unborn child. May damage fertility.
Specific target organ toxicity - single exposure Product	:	No data available.
Specific target organ toxicity - repeated exposure Product	:	No data available.
Aspiration hazard Product	:	No data available.
Other effects	:	No data available.

12. ECOLOGICAL INFORMATION:**Ecotoxicity****Acute hazards to the aquatic environment**

Fish Product	:	Static test LC50 - Danio rerio (zebra fish) - > 5.000 mg/l - 96 h
Aquatic invertebrates Product	:	Static test test EC50 - Daphnia magna (Water flea) - 4.000 mg/l - 48 h
Toxicity to algae	:	Static test ErC50 - Pseudokirchneriella subcapitata (green algae) - 9.120 mg/l - 72 h
Toxicity to bacteria	:	Static test EC50 - activated sludge - > 6.400 mg/l - 3 h

Chronic hazards to the aquatic environment

Fish Product	:	No data available.
Aquatic invertebrates Product	:	Semi-static test NOEC - Daphnia magna (Water flea) - 320 mg/l - 21 d
Toxicity to Aquatic Plants Product:	:	No data available.
Persistence and degradability		
Biodegradation Product	:	Expected to be readily biodegradable.
BOD/COD ratio Product	:	No data available.
Bioaccumulative potential		



MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

Bioconcentration factor (BCF) Product : No data available on bioaccumulation.
Partition coefficient n-octanol / water (log Kow) Product : No data available.
Mobility in soil : No data available.
Other adverse effects : No data available.

13. DISPOSAL CONSIDERATION:

Disposal instructions : Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal recommendations are based on uncontaminated material.
Contaminated packaging : Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. TRANSPORT INFORMATION:

	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR/RID	UN 2252	1,2-Dimethoxyethane	3	II	No
IMDG	UN 2252	1,2-Dimethoxyethane	3	II	No
IATA	UN 2252	1,2-Dimethoxyethane	3	II	No

15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Safety, health and environmental regulations/legislation specific for the substance or mixture
No Data Available.

MATERIAL SAFETY DATA SHEET

Version :02

PRODUCT NAME: 1,2-DIMETHOXYETHANE

CAS Number: 110-71-4

16. OTHER INFORMATION:

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 06/01/2025

Version : 02

Disclaimer: This Material Safety Data Sheet (MSDS) is for guidance and is based upon information and tests believed to be reliable. ADVENT CHEMBIO PRIVATE LIMITED makes no guarantee of the accuracy or completeness of the data and shall not be liable for any damages relating thereto. The data is offered solely for your consideration, investigation, and verification. The data should not be confused with local, state, federal or insurance mandates, regulations, or requirements and CONSTITUTE NO WARRANTY. Any use of this data and information must be determined by the technical instructor in accordance with applicable local, state or federal laws and regulations. The conditions or methods of handling, storage, use and disposal of the product(s) described are beyond the control of ADVENT CHEMBIO PRIVATE LIMITED and may be beyond our knowledge. FOR THIS AND OTHER REASONS, WE DO NOT ASSUME RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS, DAMAGE OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, USE OR DISPOSAL OF THIS PRODUCT(S).