

Methylal Anhydrous Grade

Safety Data Sheet

Preparation Date: July 1, 2022

1. Product and Company Identification

Product Name: Methylal Anhydrous Grade
Product Description: Dimethoxymethane
Product General Use: Solvent, formulation of preparations, cleaning agent, coatings and paints, thinners, paint removers. Intermediary. Use as a blowing agent for rigid and flexible foams. **FOR INDUSTRIAL USE ONLY - NOT FOR CONSUMER SALE OR USE.**

Supplier: Enviro Tech Internaitonal, Inc
1800 N 25th Avenue
Melrose Park, IL 60160

Emergency Contact: Velocity EHS 24-HR EMERGENCY CONTACT U.S. & Canada,(800) 255-3924 - INTERNATIONAL CALLS: +01-813-248-0585. Non-Emergency (708) 344-6641 Hours: Mon-Fri 8am-4pm CST

2. Hazards Identification

Signal Word: **DANGER**

Hazard Statements

H225 Highly flammable liquid and vapor



Precautionary Statements

P103 Read label before use.
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces.
P211 Do not spray on an open flame or other ignition source.
P233 Keep container tightly closed.
P240 Ground/Bond container and receiving equipment
P241 Use explosion-proof lighting, ventilating electrical equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P260 Do not breathe dust/ fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wash face, hands and any exposed skin thoroughly after handling.
P282 Wear full face shield. Wear Viton or Silvershield gloves.
P281 Use personal protective equipment as required.
P284 Wear respiratory protection. Wear full face mask.

Response

P308 + P313	IF EXPOSED or concerned: Get medical advice/attention
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P304 + P340 + P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P301 + P330 + P331	IF SWALLOWED: Seek medical advice. If a large quantity is swallowed, immediately administer lukewarm water (½ liter) only if victim is completely conscious/alert and induce vomiting. Call a poison center/doctor/physician if you feel unwell.
P306 + P361+ P363	IF ON CLOTHING: remove all contaminated clothing immediately. Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Storage & Disposal

P403	Store in a dry place. Store indoors.
P404 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with Federal, state and local regulations.

3. Composition and Information

CHEMICAL NAME	CAS	CONCENTRATION (% W/W)
Dimethoxymethane	109-87-5	>= 99.9%
	EC 203-714-2	

4. First Aid Measures

General Advice:	First Aid responders should pay attention to self-protection and use the recommended protective clothing. Ensure that eyewash stations and safety showers are close to the workstation location.
If Inhaled:	Move to fresh air. If breathing is difficult, give oxygen. If breathing is irregular or stopped, administer artificial respiration. Keep the victim calm and in a semi-upright position. Consult a physician.
In Case of Skin Contact:	Remove contact lenses. Take off immediately all contaminated clothing. Wash off immediately with plenty of water for at least 15 minutes. Seek medical advice.
In Case of Eye Contact:	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek emergency medical advice.
If Swallowed:	Seek medical advice. If a large quantity is swallowed, immediately administer lukewarm water (1/2 liter) only if victim is completely conscious/alert and induce vomiting. Call a poison center/doctor/physician if you feel unwell.

5. Fire-fighting Measures

Suitable extinguishing media:	Extinguishing media should be chosen based on surrounding conditions. Carbon dioxide (CO ₂), dry chemical, foam, water mist, AFFF. Keep containers and surroundings cool with water spray. Do not let water enter drains.
Unsuitable extinguishing media:	No limitation of extinguishing agents are given. Do not use heavy water stream.
Specific hazards during fire fighting:	Carbon oxides. Combustible. Pay attention to flashback. Vapors are heavier than air and may spread along floors. Development of hazardous combustion gases or vapors possible in the event of fire. Forms explosive mixtures with air at ambient temperatures.
Further information:	Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Do not let water enter drains.
Special protective equipment for fire-fighters:	Use NIOSH/MSHA approved/equivalent self-contained breathing apparatus in positive pressure mode and wear full protective clothing.
Fire/Explosion Hazards:	Highly flammable liquid and vapor. Do not weld or torch cut drums containing residual vapors, as vapors may be in the flammable range.

6. Accidental Release Measures

Personal precautions, protective:	Do not breathe dust/fume/gas/mist/vapors spray. Keep away from heat and sources of ignition. No open flames, no smoking. Keep public away.
Equipment and emergency procedures:	Evacuate personnel to safe areas. Remove all sources of ignition. Wear personal protective equipment. Refer to protective measures listed in sections 7 and 8.
Environmental Precautions:	Avoid release to the environment. Do not flush into surface water or sanitary sewer system. Do not allow contact with soil, surface or ground water. Prevent further leakage or spillage if safe to do so.
Methods and materials:	Take up small spills with dry chemical absorbent. Large spills may be taken up containment and cleaning up with pump or vacuum and finished off with dry chemical absorbent. Pick up and transfer to properly labeled containers. Clean contaminated floors and objects thoroughly while observing environmental regulations. May require excavation of contaminated soil.

7. Handling and Storage

Advice on protection against	No open flames. No smoking. Take precautionary measures
------------------------------	---

Fire or Explosion:	against static discharge. Do not weld or torch cut drums containing residual vapors, as vapors may be in the flammable range and an explosion could occur.
Advice on safe handling:	Provide sufficient air exchange and/or exhaust in work rooms. Local exhaust is needed at source of vapors. Do not breathe dust/fume/gas/mist/vapors/spray. In general, emissions are controlled and prevented by implementing an appropriate management system, including regular informing and training workers. Wear protective gloves/protective clothing/eye protection/face protection. For personal protection see Section 8. Wash hands and face before breaks and immediately after handling the product.
Conditions for safe storage:	Keep containers tightly closed in a dry, cool and well ventilated place. Store locked up. Local exhaust is needed at source of vapors. Mechanical ventilation is recommended. Keep away from sources of ignition - No smoking . Use explosion-proof equipment.

8. Exposure Controls/Personal Protection

Exposure Levels:	OSHA PEL 1,000 ppm ACGIH TLV 1,000 ppm
Engineering Measures:	Provide sufficient air exchange and/or exhaust in work rooms. Provide safety shower and eye wash stations.
Respiratory Protection:	Wear full face mask with NIOSH approved organic vapor respirator.
Hand Protection:	Wear Viton or Silvershield gloves when handling this product. Nitrile, neoprene, PVC or butyl gloves offer less protection and should be used only for splash protection.
Eye Protection:	Wear full face mask.
Skin and Body Protection:	Flame retardant anti-static clothing and conductive shoes should be worn.
Protective Measures:	Handle in accordance with good industrial hygiene and safety practice.
Hygiene Measures:	Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke while working with this product. Launder soiled clothes. Provide emergency eye bath and safety shower.

9. Physical and Chemical Properties

Physical State	Liquid
Appearance	Clear, Colorless
Odor	Characteristic
Melting point	- 104.8° C
Boiling point	42.3° C - 106° F
Flash point	-18° C (-0.40° F) - closed cup
Vapor pressure	439.8 hPa at 20° C (68° F) 1,548.8 hPa at 55° C (131° F)
Relative vapor density at 20 °C	2.63 - (Air = 1.0)
Relative density	0.861 (20° C)

Specific gravity / density	0.861 g/cm (20° C)
Molecular mass	76.08 g/mol
Solubility	Water: 330 g/l at 20° C (68°F) - soluble
Auto-ignition temperature	260°C (500° F) at 1,013 hPa
Viscosity, kinematic	0.371 mm ² /s
Viscosity, dynamic	0.325 mPa·s
Explosion limits	2.2 / 19.9 vol%

10. Stability and Reactivity

Reactivity:	Strong acids and oxidants. Formation of peroxides possible. Highly flammable liquid and vapor.
Chemical Stability:	Stable under normal conditions.
Possibility of Hazardous Reactions:	May form flammable vapor-air mixture. Violent reactions possible with strong oxidizing agents, strong alkalis, acid chlorides, strong bases. Exothermic reaction with acids. Risk of explosion with lithium aluminum hydride.
Conditions to Avoid:	Avoid open flame, electric arc, all ignition sources, overheating, contact with hot surfaces, heat & sparks.
Incompatible Materials:	Incompatible with strong acids and oxidants. Some plastics.
Hazardous Decomposition Products:	Peroxides

11. Toxicological Information

LD50 Oral	Rat - male and female - 6,423 mg/kg (OECD 423)
LC50 Inhalation	Mouse - male and female - 7 h - 57,000 mg/m ³ (OECD 403)
LD50 Dermal	Rabbit - male and female - > 5,000 mg/kg (OECD 402)
Skin	Rabbit. Result: No skin irritation - 4 h. (OECD 404)
Eye	Rabbit. Result: Mild eye irritation. (OECD Test)
Respiratory or skin sensitization	Maximization Test - Guinea pig. Result: Did not cause sensitization. (OECD 406)
Germ cell mutagenicity	Reverse mutation assay. <i>S. typhimurium</i> . With and without metabolic activation. Result: negative. (OECD 471) Micronucleus test. Mouse. Application Route: Intraperitoneal. Result: negative. (OECD 474)
Carcinogenicity	IARC: No NTP: No OSHA: No
Reproductive toxicity	No data available
Specific target organ toxicity	No data available
Repeated dose toxicity	Rat - male and female - inhalation (vapor) - 90 d - NOAEL - 2,000 mg/kg

Prolonged or repeated exposure can cause:, narcosis, Dermatitis, Blurred vision, Effects due to ingestion may include stomach irregularities - based on human Evidence.

12. Ecological Information

General Ecology	The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
LC ₅₀ fish ¹	>1000 mg/l 96 h <i>Dania rerio</i> (OECD 203 method)

EC ₅₀ Daphnia ¹	>1200 mg/l 48 h Daphnia magna (OECD 202 method)
EC ₅₀ other aquatic organisms ¹	> 10 g/l
LC ₅₀ fish ²	> 6.99 g/l 96 hr Pimephales promelas
Log Pow	0 @ 20° C
Log Koc	0.7439
Biodegradability aerobic	Exposure time 20 - 25 d. Result: - Not readily biodegradable.
Bioaccumulative potential	No data available
Mobility in soil	No data available
PBT and vPvB assessment	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

13. Disposal Considerations

Disposal Methods: Dispose of contents & container to an approved hazardous or special waste collection point. Abide by all local, regional, national and international regulations. Flammable vapors may accumulate in the container.

14. Transportation Information

DESCRIPTION	UN1234 Class: 3 PG II
DOT PROPER SHIPPING NAMES	Methylal
Packing group	II
Hazard Label	3 - Flammable Liquid
DOT Packaging Non Bulk (49 CFR 173.xxx)	202
DOT Packaging Bulk (49 CFR 173.xxx)	242

The transport classification(s) provided herein are for informational purposes only and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations. International shipping regulation may vary from US DOT regulations. Consult a transportation expert before shipping internationally.

15. Regulatory Information

USMCA	Does not Comply	
USA TCSA	All of the components of this product are in the EPA TSCA inventory and are in compliance with 15 USC 2601-2629. No substances are subject to a Significant New Use Rule. No substances are subject to TSCA 12(b) export notification requirements.	
USA HAP	N/A	
USA RCRA	N/A	
USA CERCLA	N/A	
SARA 302	None	
SARA 304	None	
SARA 313	None	
SARA 311/312	Acute Health Hazard:	No
	Chronic Health Hazard:	Yes
	Fire Hazard:	Yes

Sudden Release of Pressure Hazard:	No
Reactive Hazard:	No
Skin corrosion or irritation	No
Serious eye damage or eye irritation	No
Carcinogenicity	No
Reproductive toxicity	Unknown
Specific target organ toxicity (single or repeated exposure)	Unknown

STATE REGULATION

Right to Know	Massachusetts, New Jersey, Pennsylvania, Rhode Island Hazardous Substance List
California	1,000 ppm California permissible exposure limit (Title 8 Article 107)

International

EINECS	Listed
Canada DSL	Listed
Australia AICS	Listed
Phillippines PICCS	Listed
Taiwan TCSI	Listed
Japan ISHL	Listed
South Korea KECI	Listed
New Zealand NZLOC	Listed

16. Other Information

Each user of this product should study this SDS carefully and consult appropriate expertise as necessary to become aware of and understand the data contained in this SDS and any hazards that may be associated with this product. The information provided in this Safety Data Sheet relates only to the specific material designated herein. The user is responsible for determining the conditions of safe use of this product and for complying with all Federal, State and Local governmental laws and regulations concerning its use. The information contained herein is accurate to the best of our knowledge. Enviro Tech International, Inc. makes no warranty, express or implied, including the warranty of merchantability and fitness for a particular purpose, and assumes no liability or responsibility for the accuracy, completeness, timeliness or usefulness of this information. Enviro Tech International, Inc assumes no liability for any damages incurred, whether directly or indirectly, as a result of any errors, omissions or discrepancies in this information. Enviro Tech International, Inc. assumes no liability for reliance on this data and assumes no liability for damages related to the use or misuse of this product in your process or in combination with other substances.

NFPA Health 0	Flammability 3	Instability 0
HMIS Health 0	Flammability 3	Physical Hazards 0

Preparation Date: July 1, 2022
Copyright 2022 Enviro Tech International, Inc.