



Product Name: Molecular Modifier
Revision Date: 10/28/2013

SAFETY DATA SHEET

SECTION 1 IDENTIFICATION

PRODUCT

Product Identifier: Molecular Modifier
Intended Product Use: Odor Control/Waste Biodegradation
Manufacturer Identification Code: 2030

MANUFACTURER

Chemical Technologies International Inc.
P.O. Box 968
Rancho Cordova, CA 95741 USA
Phone: (916) 638-1315 Fax: (916) 638-0712
24 hours Emergency Assistance Calls (USA): CHEMTREC (800) 424-9300
Please reference name and manufacturers identification number

SECTION 2 HAZARD(S) IDENTIFICATION

GHS Classification

Flammable Liquid (Category 4)

Acute Dermal Toxicity (Category 5)

Serious Eye Damage/Eye irritation (Category 2B)

Acute Inhalation Toxicity (Category 5)

Routes of Exposure: Eye contact, skin contact, Inhalation, and ingestion.

Inhalation: Unlikely to occur when used as directed. Excessive inhalation vapors/mist may cause irritation of the respiratory tract. This product is not likely to present an inhalation hazard at normal temperatures, pressures when used as directed.

Eye Contact: Can irritate eyes

Skin Contact: Repeated exposure may cause skin irritation, drying, chapping. Not likely to be absorbed through the skin in harmful amounts.

Ingestion: Harmful if swallowed can cause gastrointestinal irritation; including but limited to nausea, vomiting and diarrhea.

Carcinogenic Potential: Not established.

Acute Effects: This product is considered to be a potential irritant. This product should not be used for any other purpose than the intended use in section 1.

Chronic Effects: Not established.



Health hazard	1
Flammability hazard	1
Reactivity hazard	0
Other hazard	

Signal word: **Warning**

Hazard statement(s): **H227: Combustible Liquid**
H313: May be harmful in contact with skin
H320: Causes eye irritation
H333: May be harmful if inhaled



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SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS #	CONCENTRATIONS
1. 1-Methoxy-2-propanol	107-98-2	1-10%

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SECTION 4 FIRST- AID MEASURES

Inhalation: Remove from further exposure to fresh air. If respiratory irritation, dizziness, or nausea occurs seek immediate medical attention.

Eye Contact: Flush eyes with a directed stream of water for 15 minutes, forcibly holding eyelids apart to ensure complete irrigation of all eye and lid tissue. Washing eyes immediately after exposure is essential to achieve maximum effectiveness and minimize potential irritation. If irritation persists, seek immediate medical attention.

Skin Contact: Wash contact areas with soap and water. Launder exposed clothing before reuse.

Ingestion: If swallowed, do not induce vomiting. Seek immediate medical attention.

SECTION 5 FIREFIGHTING MEASURES

FLAMMABILITY PROPERTIES

Flashpoint: <122F

Flammable Limits: N/A

Auto ignition Temperature: N/A

FIREFIGHTING PROCEDURES

General Hazard: Combustible liquid.

Firefighting Instructions: Evacuate all unnecessary personnel. Use dry chemical, water fog, foam or CO₂. Do not use straight streams of water

Firefighting Equipment: Firefighters should wear NIOSH/MSHA approved self-contained, positive pressure breathing apparatus and full protective clothing.

Hazardous Combustion Products: Decomposition and combustion materials may be toxic. Burning may produce oxides of carbon and other unidentified organic compounds.

Unusual Fire and Explosion Hazards: Vapors may be flammable and are heavier than air. Vapors may travel across the ground and reach remote ignition sources causes a flashback fire danger. Hazardous material.



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SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Persons performing the clean up should wear personal protective equipment sufficient to keep material away from skin. Avoid direct contact with material. Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. See section 4 for First-Aid Advice. See section 5 for Firefighting Advice.

PROTECTIVE MEASURES

To minimize exposure to all chemicals, including this product, use good industrial hygiene and common sense. Use only in well ventilated area. If necessary, use exhaust ventilation to insure adequate ventilation. Insure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (See section 4 for more advice). Wear NIOSH/MSHA approved organic respirator when ventilation is not adequate or when the sufficiency of ventilation to maintain concentrations below exposure limits is in question. Wear chemical safety goggles to protect against splashes or contact with eyes. Avoid direct contact with material. See OSHA 29 CFR 1910.33

CLEAN-UP PROCEDURES

Comply with all applicable governmental regulations on spill reporting, handling and disposal of waste. Contain all spills or leaks to prevent discharge into the environment. Responsibility of all spills or releases reported to the appropriate local, state and federal agencies falls upon the user.

Small Spills: Wipe or mop up and dispose of in DOT approved waste container. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface water and sewers. Contain spill as a liquid for possible recovery, or absorb with compatible sorbent material and shovel with a clean tool into a sealable container for disposal.

Large Spills: Contain by diking with soil or other non-combustible absorbent material, then dispose into DOT approved waste container. Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

SECTION 7 HANDLING AND STORAGE

HANDLING

This product is professional strength product to be used by professionals only. Keep away from heat, sparks, or flame. Avoid contact with skin. Impervious boots/shoes covering should be used if material is anticipated to contact feet. Discard leather articles, such as shoes, saturated with this product. As with all chemicals, practice good industrial hygiene when handling this product. Always work in a well-ventilated area and avoid inhalation of product dust, vapor or mist, do not ingest or have contact with your eyes or skin. Do not smoke while using this product.

The manufacturer and seller warrant that this product conforms to its standard specifications when used according to directions. As the conditions of method of its use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true but all statements and suggestions are made without any warranty, expressed or implied, regarding accuracy of the information. The hazards connected with the use of this material and the results to be obtained from the use thereof.

STORAGE

Keep away from heat, sparks, or flame. Avoid storage with oxidizing or reducing agents, acids. Employees should be trained to handle this product safely. Store the product in a cool dry area away from ignition sources. Loosen closures cautiously. Keep container tightly closed when not in use and during transport. Empty product containers may retain product residue and can be dangerous.

Storage temperature: Ambient

Storage pressure: Ambient



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SECTION 8 EXPOSURE / PERSONAL PROTECTION

EXPOSURE LIMITS

Exposure limits have not been established for this mixture. Avoid, as far as reasonably practicable, inhalation of vapor, mists or fumes generated. Limits for components of mixture are:

COMPONENT #	OSHA PEL TWA STEL	ACGIH TLV TWA STEL	NIOSH TWA STEL
1. 1-Methoxy-2-propanol	100ppm	100ppm	100ppm

ENGINEERING CONTROLS

The level of protection and types of control will vary depending upon potential exposure conditions. If user operations generate dust, fume or mist, use adequate ventilation to keep exposure below exposure limit.

PERSONAL PROTECTION

To minimize exposure to all chemicals, including this product, use good industrial hygiene and common sense. One should always use chemicals with an awareness of the potential hazard of the effect on the human system.

Ventilation and engineering controls: Use only in well ventilated area. If necessary, use exhaust ventilation to insure adequate ventilation. Insure that water is readily available and that you are prepared to properly wash out your eyes should the need arise. (Refer to section 4).

Respiratory: Wear NIOSH/MSHA approved organic respirator when ventilation is not adequate or when the sufficiency of ventilation to maintain concentrations below exposure limits is in question.

Eye Protection: Wear safety goggles to protect against eye contact. See OSHA 29 CFR 1910.33

Skin: Wear chemical impervious gloves. Wear protective clothing appropriate for the task to prevent skin contact.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State and Appearance: Liquid

Odor: mild scent

Vapor density: N/A

Freezing point: N/A

Density: N/A

Flammability: not established

Evaporation rate: N/A

Upper/lower flammability or explosive limits: N/A

Odor threshold: N/A

Flash point: <100

Evaporation rate: N/A

Upper/lower flammability or explosive limits: N/A

Vapor pressure: N/A

Solubility: soluble in water

Color: Clear

pH: 7.5-8

Boiling point: N/A

Melting point: N/A

Partition coefficient: n-octanol/water: N/A

Particle size: N/A

Viscosity: N/A

Vapor pressure: N/A

Vapor density: N/A

Relative density: N/A

Flammability (solid, gas): flash point >122F

Decomposition temperature: N/A

Vapor density: N/A

Auto-ignition temperature: N/A



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SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: Stable under ambient temperature and atmospheric pressure. Stable under recommended storage and handling conditions.

Conditions to avoid: Spark, flame and incompatible materials.

Incompatibility with other materials: Avoid acids and oxidizing agents.

Hazardous decomposition products: There are no known hazardous decomposition materials of this mixture.

Hazardous polymerization: Components of this mixture show no hazardous polymerization. Not reactive with water.

Conditions to Avoid: No anticipated hazards, if used as intended and directed.

SECTION 11 TOXICOLOGICAL INFORMATION

Toxicological information has not been established on this mixture. Toxicological information on components within this mixture is given by:

COMPONENT #	TOXICITY
1. 1-Methoxy-2-propanol	LD50 oral – mouse – 11700 mg/kg LD50 Inhalation – rat – 5h – 10,000ppm Eyes – rabbit – mild eye irritation - 24 h

SECTION 12 ECOLOGICAL INFORMATION

Ecological information has not been established for this product. Ecological information on components within this mixture is given by:

COMPONENT #	TOXICITY
1. 1-Methoxy-2-propanol	Not Established

Dispose of all waste, empty bottles and contaminated equipment in accordance with all applicable federal, state and local health and environmental regulations. If discarded, this product is considered a RCRA ignitable waste, D001. Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code applicable to the disposal of this product.

Do not dump into storm drains or any body of water. All disposal methods must be in compliance with all federal, State/ Provincial and local laws and regulations. Regulations may vary in different locations.

Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. The vendor has no control over the management practices or the processes by which the party who handles or uses this material. The information presented here pertains only to the product as shipped in its intended condition and recommended usage.

SECTION 14 TRANSPORT INFORMATION

Consult 49 CFR to assure compliance with all applicable federal, state/provincial and local laws and regulations that may apply to you.



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SECTION 15	REGULATORY INFORMATION
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US Federal Regulations:

OSHA standards require that information be provided to employees regarding the hazards of chemicals by means of a hazard communication program including labeling, safety data sheet (SDS) sheets, training and access to written records. We request that you, as per your legal duty to, make all information in this SDS available to your employees and those who handle or consume the product.

To aid our customers in complying with regulatory requirements regulatory information for components of this product are indicated below.

This *mixture* has *no established regulatory information*.

COMPONENT #

1. 1-Methoxy-2-propanol

Regulatory Information

OSHA Hazards : Flammable Liquid, Irritant, Target Organ Effect

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard, Chronic health Hazard

MA, PA, & NJ Right to Know: monopropylene glycol methyl ether CAS

No:107-98-2

SECTION 16	OTHER INFORMATION
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While the information is believed to be accurate, CTI makes no representations as to its accuracy or sufficiency. This SDS summarizes to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources of each individual component. Since CTI cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. User assumes all risks incident to the use of this (these) product(s). Users are responsible to verify this data under their own operating conditions to determine whether this product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance on information contained herein. This information relates only to the product-designated herein, and does not relate to its use in combination with any other material or in any other process.