

# MATERIAL SAFETY DATA SHEET

**HAZARD RATINGS**  
**Health: 2**  
**Flammability: 2**  
**Reactivity: 0**  
**Personal Protection: B**

**NOTICE: Judgment may be based on indirect test and technical literature. The OSHA Hazard Communication Standard only requires MSDS's and special labeling for materials defined as "HAZARDOUS"; see 29 CFR 1910.1200 (c). This document may be about a product which is NOT hazardous but is provided as information for our customers. See references for information.**

## SECTION I. PRODUCT IDENTIFICATION

Product Identifier: Bio-2  
Product VOC as Per Rule 102: <100 Grams per Liter  
Manufactured By: Kor-Chem, Inc.  
5800 Bucknell Drive  
Atlanta, GA 30336

Product Identification #(PIF): 01466  
Emergency Telephone #: 1-800-255-3924  
General Information #: 404-344-9580  
Prepared by: Sonya Lockhart  
Date Prepared: June 2, 2004  
Updated: 01/06/2010

## SECTION II. HAZARDOUS INGREDIENTS

	CAS #	OSHA/PEL	TLV	STEL	max. %
1. Dimethyl Glutarate	1119-40-0	NE	NE	NE	60
2. Dimethyl Adipate	627-93-0	NE	NE	NE	17
3. Dimethyl Succinate	106-65-0	NE	NE	NE	17
4. Tetrahydrofurfuryl alcohol	97-99-4	NE	NE	NE	10

## SECTION III. HEALTH HAZARD INFORMATION

.....**Primary Routes of Entry: X Skin X Eyes    Inhalation    Ingestion**

◆*Effects of overexposure:*

- Eye Contact: Can cause eye irritation.
- Skin Contact: Can cause skin irritation. Prolonged or repeated contact may cause dermatitis.
- Inhalation: Breathing large amounts may be harmful.
- Ingestion: Swallowing large amounts may be harmful.

## SECTION IV. EMERGENCY FIRST AID

- ◆*Eyes:* Flush well with water for at least 15 minutes.
- ◆*Skin:* Prolonged contact is essentially nonirritating to skin. If irritation develops, wash with water.
- ◆*Inhalation:* Move to fresh air.
- ◆*Ingestion:* Drink lots of water to dilute. Call physician, medical facility or poison control for advice on whether to induce vomiting.

## SECTION V. FIRE & EXPLOSION DATA

Flammability: NOT FLAMMABLE  
Means of extinction: Foam, dry chemicals, CO<sub>2</sub>.  
Autoignition Temperature: NA  
Hazardous combustion products: Carbon monoxide and carbon dioxide.

Flash Point: Above 200° F  
Upper Flammability Limit (% by volume): NA  
Lower Flammability Limit (% by volume): NA

- ◆*Special Fire Fighting Procedures:* Firefighters should have eye protection and wear self-contained breathing apparatus.
- ◆*Unusual Fire Fighting Hazard:* Water or foam may cause frothing which can be violent and possibly endanger the life or the firefighter.

## SECTION VI. REACTIVITY DATA

Chemical stability: Stable  
Hazardous polymerization: Will not occur.  
Incompatibility with other substances: Strong acids, strong bases and strong oxidizing agents.  
Conditions to Avoid: Heat, sparks, flame or other sources of ignition.  
Hazardous decomposition products: Carbon monoxide and carbon dioxide.

## SECTION VII. HANDLING & STORAGE

*Storage:* Keep container closed, when not in use. Keep away from heat, flame, or sunlight. Protect from physical damage.

Handling: Do not premix with other chemicals. Exercise reasonable care and precaution.

**SECTION VIII. EXPOSURE CONTROL/PERSONAL PROTECTION**

Personal protective equipment: Use rubber gloves and eye protection.

Gloves (specify): Chemical resistant gloves

Respirator (specify): NIOSH, if ventilation inadequate

Eye (specify): Chemical resistant eye ware

Footwear (specify): Chemical resistant shoes

Clothing (specify): Normal materials handling clothing.

Other: Always provide adequate ventilation.

**SECTION IX. SPECIAL PRECAUTIONS/ OTHER COMMENTS**

Carefully read all instructions on label before handling this product. "FOR INDUSTRIAL USE ONLY"

**SECTION X. PHYSICAL DATA**

Boiling point: >212°F

Vapor Density: (Air = 1): ND

Specific Gravity, (water + 1.0): 1.092

pH, Neat: NA

% Volatile/ volume: 100%

Vapor Pressure: ND

Solubility: 5.0% at 20°C

Evaporation Rate: < 0.10

Description/odor: Clear/colorless liquid with sweet odor.

**SECTION XI. TOXICOLOGICAL INFORMATION**

◆ Effects of acute exposure to product: Liquid and vapor irritating to eyes, skin and respiratory tract.

◆ Effects of chronic exposure to product: Prolonged or repeated contact with skin may cause dermatitis. Prolonged exposure to vapor may cause CNS depression.

**SECTION XII. ECOLOGICAL INFORMATION**

NOT DETERMINED.....

**SECTION XIII. ACCIDENTAL RELEASE MEASURES/ DISPOSAL INFORMATION**

Large spills cannot occur because of packaging. Material should be soaked onto absorbent and shoveled into waste containers. Dispose of contaminated absorbent material in accordance to local, state and federal regulations. Do not release to open, public waters.

**SECTION XIV. TRANSPORT INFORMATION**

Not regulated by D.O.T.

**SECTION XV. REGULATORY INFORMATION**

**SARA TITLE II REPORTING REQUIREMENTS**

SECTION 302: Not listed

SECTION 311: Immediate and Delayed Health

SECTION 312: Immediate and Delayed Health

SECTION 313: Not listed

CERCLA: This product is not reportable.

RCRA: Not Applicable.

**SECTION XVI. ADDITIONAL INFORMATION**

NONE.....

The information contained herein is based on data available to us and is believed to be correct. We make no warranty, however, expressed or implied regarding the accuracy of these data or the results obtained from the use thereof.

**Regulatory Standards:** DOT TITLE 49, Code of Federal Regulations 172.101: Parts 100 to 177, Revised 10/1/92. SUPER FUND AMENDMENTS REAUTHORIZATION ACT OF 1986, TITLE III TOXIC SUBSTANCE CONTROL ACT LIST (TSCA)-INGREDIENTS LISTED. REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES NATIONAL TOXICOLOGICAL PROGRAM (NTP) REPORT OF CARCINOGENS INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC) MONOGRAPHS, OCCUPATIONAL SAFETY & HEALTH REGULATIONS. CODE OF FED. REGS. FOOD & DRUG, 21 PARTS 170 to 199, Revised 4/1/91, 173.310.