

AMERICAN INTERNATIONAL INDUSTRIES2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET****PRODUCT NAME:** IBD Grip Monomer Liquid**DATE:** 4/28/2004**FORMULA:** 30-1324**REV.** NEW**Section 1. Material Identification and Information****Hazardous Ingredients:**

Component	CAS #	%	TOXICOLOGICAL DATA
Ethyl Methacrylate	97-63-2	>70%	OSHA TWA/STEL: 100ppm ACGIH TWA/STEL: 100ppm

Section 2. Physical / Chemical Characteristics

Boiling Point: 243°F	Specific Gravity: 0.918
Vapor Pressure: 77 mm Hg @ 20°C (mm Hg and Temperature)	(@ 25°C)
Vapor Density: 3.9 (Air = 1)	Viscosity: < 1mPa s @ 20°C
Solubility in Water: 0.5g/100g @ 20°C	Evaporation Rate: 1.5 (Butyl Acetate = 1)
Appearance: Blue-Violet Liquid	Water Reactive: N/A
Odor: Sharp Ester-Like	pH: N/A
	% Volatile: 99%+

Section 3. Fire and Explosion Hazard Data

Flash Point:	68°C Tag Closed Cup
Auto-Ignition Temperature:	392°C
Flammability Limits in Air % by Volume:	LEL: 2% UEL: 2.5%
Extinguisher Media:	Foam, carbon dioxide, dry chemical, or carbon tetrachloride.
Fire Fighting Procedures:	Wear self-contained breathing apparatus and full protective gear. Water may be ineffective unless used as a fine spray or fog. Use water spray to cool the exposed containers of methacrylate monomer.
Unusual Fire and Explosion Hazards:	Vapors may travel to source of ignition and flash back. Avoid ignition sources or excessive temperatures. Heat can induce polymerization with rapid release of energy. Closed containers may rupture explosively. Spontaneous polymerization may occur with prolonged aging.

Section 4. Reactivity Hazard Data

Stability:	<input checked="" type="checkbox"/> Stable	<input type="checkbox"/> Unstable
Conditions to Avoid:	Temperatures above 60°F, oxidizing or reducing agents, peroxides and amines, storage in absence of inhibitor, and inadvertent addition of catalyst.	

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Reducing and oxidizing agents and UV light.

Hazardous Decomposition:

Oxides of carbon when burned.

Hazardous Polymerization: May Occur Will Not Occur**Section 5. Health Hazard Data****POTENTIAL HEALTH EFFECTS, SIGNS and SYMPTOMS OF EXPOSURE:****Primary Routes of Entry:** Inhalation Skin Absorption Ingestion Eye Contact

Eye: Vapor concentrations may cause irritation of eyes. Liquid contact with eyes can cause irritation and possible corneal damage.

Skin: Liquid concentration may cause moderate skin irritation. Repeated or prolonged contact may cause allergic skin rashes, itching and swelling which becomes evident on re-exposure to this product.

Ingestion: Causes irritation, a burning sensation of the mouth, throat and respiratory tract and abdominal pain.

Inhalation: High vapor concentrations may irritate the respiratory system. Prolonged exposure can lead to headaches, nausea, drowsiness and unconsciousness.

Sub-Chronic Effects: Unlikely to present a cancer hazard in man.

NOTE: Refer to Section 8, Toxicological Information for Details**Emergency First Aid Procedures:**

Eye Contact: Flush with water for 15 minutes, including under eyelids. Seek medical attention if discomfort persists.

Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing and wash before reuse. Seek medical attention if discomfort persists.

Ingestion: Rinse mouth out with water. Only induce vomiting if directed by a physician. Never give anything by mouth to an unconscious person. Seek prompt medical attention.

Inhalation: Remove to fresh air. If having breathing difficulty, give oxygen. If breathing has stopped, give artificial respiration. Seek medical attention if discomfort persists.

Section 6. Control and Protective Measures**Engineering Controls:**

Use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

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General: To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with OSHA PPE Standard (29 CFR 1910.132) be conducted before using this product. Provide eye wash stations and safety showers. Wear impervious clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit. Nitrile rubber is better than PVC.

Respiratory Protections (Specific Type):

Use self-contained breathing apparatus when needed. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

Eye/Face Protection: Wear safety glasses. Wear coverall chemical splash goggles and face shield when possibility exists for eye and face contact due to splashing or spraying material.

Skin Protection: Use impermeable gloves to minimize skin contact.

Section 7. Precautions for Safe Handling and Use / Leak Procedures

Steps to be Taken if Material is Spilled or Released:

Evacuate area and eliminate all possible sources of ignition. Use self-contained breathing apparatus and protective clothing. Dike and absorb with inert materials (sand, soda, ash, vermiculite, etc.) and then transfer to proper containers for disposal, using non-sparking tools. Keep spills out of sewers and open bodies of water. Remove saturated clothing and wash affected areas with soap and water.

Waste Disposal Methods:

Dispose of in accordance with your local, state, and federal regulations.

Handling: Keep away from heat, sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor mist. Use with adequate ventilation. Ground all metal containers when transferring and use explosion-proof equipment. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash skin thoroughly after handling.

Storage: Store in a cool, dry area. Keep container closed when not in use. Store at ambient temperatures out of direct sunlight. Store in a well ventilated place. Store in accordance with National Fire Protection Association recommendations. Maintain air space inside storage containers. Inhibitor requires air (oxygen) contact to function. Check inhibitor levels after 3 months and return to original level.

Explosion Hazard: Avoid ignition sources or excessive temperatures. Heat can induce polymerization with rapid release of energy. Closed containers may rupture explosively. Spontaneous polymerization may occur with prolonged aging.

Section 8. Toxicological Information

Acute Oral Toxicity:	Oral (Rat) LD50: 1330mg/kg
Acute Dermal Toxicity:	Dermal (Rabbit) LD50: > 9100mg/kg
Acute Inhalation Toxicity:	Inhalation (Rabbit) LD 50: 3800ppm
Irritation – Skin:	No Data Available

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Irritation - Eye: No Data Available
Sensitization No Data Available
Mutagenicity: Test positive as a mutagen on laboratory animals.
Sub-Chronic Toxicity: No Data Available

Section 9. Ecological Information

Ecotoxicological Information**Acute Toxicity to Fish:** No Data Available
Acute Toxicity to Invertebrates: No Data Available
Acute Toxicity to Algae: No Data Available
Bioconcentration: No Data Available
Toxicity to Sewage Bacteria: No Data Available**Chemical Fate Information:****Biodegradability:** No Data Available
Chemical Oxygen Demand : No Data Available

Section 10. Disposable Concentrations

After the addition of excess inhibitor, incinerate the liquid and diking in accordance with federal, state and local regulations. Do not incinerate in closed containers. Biodegradation is also possible. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH. Exert extra care in igniting as this material is highly flammable.

Section 11. Transport Information

DOT/ UN Shipping Name: UN 1993; Flammable liquid, n.o.s. Class 3, PG II
RQ(lbs): 1000

Section 12. Regulatory Information

US Federal Regulations

Clean Air Act HAP/ODS:

This product contains the following HAP's or ODS: None

Clean Water Act Priority Pollutant:

This product contains the following chemicals listed under the U.S. Clean Water Act Priority Pollutant List: None.

FDA: Food Packaging Status:

This product has not been cleared by the FDA for use in food packaging and/or other applications as an indirect food packaging additive.

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Occupational Safety and Health Act:

This product is considered to be hazardous under the OSHA Hazard Communication Standard. It's hazards are: Immediate (acute) health hazard, Fire hazard

RCRA:

This product contains the following chemicals considered to be hazardous waste under RCRA (40 CFR 261). Ethyl Methacrylate CAS #97-63-2 RCRA Code U118.

SARA Title III: Section 302

This product contains no chemicals regulated under Section 302 as extremely hazardous substances.

SARA Title III: Section 304:

This product contains chemicals regulated under Section 304 as extremely hazardous chemicals for emergency release notification ("CERCLA" List): Ethyl Methacrylate CAS #97-63-2, RQ (Lbs) 1000.

SARA Title III: Section 311-312:

This product is considered to be hazardous under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). Is hazards are: Immediate (acute) health hazard, Fire hazard

SARA Title III: Section 313:

This product contains the following chemicals which are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: None

TSCA Section 8(b):

This product contains chemicals listed on the TSCA inventory or otherwise complies with TSCA premanufacture notification requirements.

State Regulations**CA Right-to-Know Law:**

None

MA Right-to-Know Law:

Ethyl Methacrylate CAS# 97-63-2

NJ Right-to-Know Law:

Ethyl Methacrylate CAS# 97-63-2

PA Right-to-Know Law:

Ethyl Methacrylate CAS# 97-63-2

FL Right-to-Know Law:

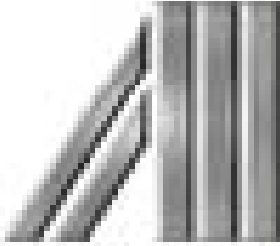
Ethyl Methacrylate CAS# 97-63-2

MN Right-to-Know Law:

None

International Regulations**CDSL: Canadian Inventory (on Canadian Transitional List):**

Ethyl Methacrylate: DSL regulatory status: Included, WHMIS: B2: flammable liquid D-2B: Toxic



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EINECS: European Inventory:

- Ethyl Methacrylate (202-597-5): Hazard Symbol (C I F T), R Values (R11, R23/24/25, R36/37/38, R43, R52/53), S Values (S9, S16, S28A, S29, S33, S45, S61)

Section 13. Other Information

Hazard Rating System:

NFPA: Health = 2/Flammability = 3/Reactivity = 1
HMIS: Health = 2/Flammability = 3/Reactivity = 1