

**AMERICAN INTERNATIONAL INDUSTRIES**2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET****PRODUCT NAME:** IBD Tip Blender **DATE:** 10/14/2004
FORMULA: 71201 (30-8956) **REV.** NEW**Section 1. Material Identification and Information****Hazardous Ingredients:**

Component	CAS #	%	TOXICOLOGICAL DATA
Ethyl Methacrylate	97-63-2	> 99%	ACGIH TWA/STEL: 100ppm OSHA TWA/STEL: 100ppm

Section 2. Physical / Chemical Characteristics

Boiling Point: 244°F / 118°C	Specific Gravity: 0.918 (H ₂ O = 1)
Vapor Pressure: 15 @ 20°C (mm Hg and Temperature)	Melting Point: N/A
Vapor Density: > 3.9 (Air = 1)	Evaporation Rate: Not Determined
Solubility in Water: Insoluble	Water Reactive: N/A
Appearance: Clear, Colorless Liquid	% Volatile: 99+
Odor: Sharp Ester-Like Odor	(W/W%)

Section 3. Fire and Explosion Hazard Data

Flash Point and Method Used:	60°F / 16°C (Set-a-Flash)
Auto-Ignition Temperature:	771°F / 411°C
Flammability Limits in Air % by Volume:	LEL: 1.80% UEL: Not Determined
Extinguisher Media:	Foam, carbon dioxide, or dry chemical.
Special 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 on prolonged aging.

Section 4. Reactivity Hazard Data**Stability:** Stable Unstable**Conditions to Avoid:** Temperatures above 40°C, oxidizing or reducing agents, peroxides and amines, storage in absence of inhibitor, and inadvertent addition of catalyst.

**AMERICAN INTERNATIONAL INDUSTRIES**2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME: IBD Tip Blender **DATE:** 10/14/2004
FORMULA: 71201 (30-8956) **REV.** NEW

Incompatibility (Materials to Avoid):

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

Primary Routes of Entry: Inhalation Skin Absorption Ingestion Eye Contact**Carcinogen Listed In:** NTP IARC Monograph OSHA Not Listed**Health Hazards:**
Eye Contact: Vapor concentrations may cause irritation of eyes. Liquid contact with eyes can cause irritation and possible corneal damage.
Skin Contact: 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.
Inhalation: High vapor concentrations may irritate the respiratory system. Prolonged exposure can lead to headaches, nausea, drowsiness, and unconsciousness.
Ingestion: Causes irritation, a burning sensation of the mouth, throat and respiratory tract and abdominal pain.
Sub-Chronic Effects: Unlikely to present a cancer hazard in man.**Emergency First Aid Procedures:**Eye Contact: Flush with water for 15 minutes, including under eyelids. Get medical help if discomfort persists.
Skin Contact: Wash thoroughly with soap and water. Remove contaminated clothing. Get medical help if discomfort persists. Wash clothing before use.
Inhalation: Remove to fresh air. If having breathing difficulty, give oxygen. If breathing has stopped, give artificial respiration. Get medical help 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.

**AMERICAN INTERNATIONAL INDUSTRIES**2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME:	IBD Tip Blender	DATE:	10/14/2004
FORMULA:	71201 (30-8956)	REV.	NEW

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

Facilities storing or utilizing this material should be equipped with an eye facility and safety shower. Use process enclosures local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof ventilation equipment.

General Personal Protective Equipment:

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29 CFR 1910.132), or European Standard EN166 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):

A NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions. Flow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Skin Protection: Use impermeable clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit. Nitrile rubber is better than PVC.

Eye 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.

Ventilation to be Used:

Local Exhaust Other (Specify)

Hygienic Work Practices:

Good Manufacturing Practices.

Section 7. Precautions for Safe Handling and Use / Leak Procedures**Steps to be Taken if Material is Spilled or Released:**

Eliminate all sources of heat and ignition. Use absorbent material for spills and dike it, wash spill material into retaining containers. Place containers in a well ventilated area. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e.g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as sawdust. Do not flush to sewer! US Regulations (CERCLA) require reporting spills and releases to soil, water, and air in excess or reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 42408802. If a leak or spill has not ignited, use water spray to disperse the vapors, to protect personnel attempting to stop leak, and to flush spills away from exposures.

**AMERICAN INTERNATIONAL INDUSTRIES**2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME:	IBD Tip Blender	DATE:	10/14/2004
FORMULA:	71201 (30-8956)	REV.	NEW

Waste Disposal Methods:

Dispose of diking materials and absorbent in compliance with State, Local, and Federal regulations. Residual vapors may explode on ignition; do not cut, drill, or weld on or near the container. Mix with compatible chemical which is less flammable and incinerate.

Whatever cannot be saved for recovery or recycling should be handled as hazardous waste to sent to a RCRA approved waste facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

Precautions to be taken in Handling and Storing:

Handling: Keep away from heat, sparks, flames, and other sources of ignition. Avoid contact with eyes, skin, and clothing. Avoid breathing vapor or 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 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.

Other Precautions and/or Special Hazards:

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

Section 8. Toxicological Information

Acute Oral Toxicity: Oral (Rat) LD50: 13,468mg/kg

Acute Dermal Toxicity:

Dermal (Rabbit) LD50: > 10,000mg/kg

Acute Inhalation Toxicity:

Inhalation (Rat) 4-hour LC50: 8300ppm

Irritation-Skin: Not Determined

Irritation-Eye: Not Determined

Sensitization: Not Determined

Mutagenicity: The compound does not produce genetic damage in mammalian cell cultures, but has not been tested on animals.

Sub-Chronic Toxicity:

Not Determined

**AMERICAN INTERNATIONAL INDUSTRIES**2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME:	IBD Tip Blender	DATE:	10/14/2004
FORMULA:	71201 (30-8956)	REV.	NEW

Section 9. Ecological Information**Ecotoxicological Information:**

Acute Toxicity to Fish:	Not Determined
Acute Toxicity to Invertebrates:	Not Determined
Acute Toxicity to Algae:	Not Determined
Bioconcentration:	Not Determined
Toxicity to Sewage Bacteria:	Not Determined

Chemical Fate Information:

Biodegradability:	Not Determined
Chemical Oxygen Demand:	Not Determined

Section 10. Transport Information

DOT (49CFR172):	Proper Shipping Name:	Ethyl Methacrylate, 3, UN2277, PGII
	Identification Number:	UN2277
	Marine Pollutant:	No
	Special Provisions:	T1
	Emergency Response Guidebook (ERG)#:	129P (possibly polymerization risk)
IATA (DGR):	Proper Shipping Name:	Ethyl Methacrylate, stabilized, 3, UN2277, PGII
	Class or Division:	3
	UN or ID Number:	UN2277
	Packaging Instructions:	T1
	Emergency Response Guidebook (ERG)#:	3L
IMO (IMDG):	Proper Shipping Name:	Ethyl Methacrylate, stabilized, 3, UN2277, PGII
	Class or Division:	3
	UN or ID Number:	UN2277
	Special Provisions & Stowage Segregation:	F-E, S-D
	Emergency Response Guidebook (ERG)#:	Flash Point - 16°C

Section 11. Regulatory Information**US Federal Regulations:**

Clean Air Act: HAP/ODS:

This product contains the following hazardous air pollutants (HAP) as defined by the U.S. Clean Air Act:

●None

This product contains ODS.

**AMERICAN INTERNATIONAL INDUSTRIES**2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924**MATERIAL SAFETY DATA SHEET**

PRODUCT NAME:	IBD Tip Blender	DATE:	10/14/2004
FORMULA:	71201 (30-8956)	REV.	NEW

Clean Water Act: Priority Pollutant/Hazardous Substance:

This product contains the following Priority Pollutants and Hazardous Substances as defined by the CWA:

- 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 additive.

Occupational Safety and Health Act:

This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard, Its hazards are:

- Immediate (acute) health hazard
- Fire hazard

RCRA:

This product contains chemicals considered to be hazardous waste under RCRA (40 CFR 261):

- Ethyl Methacrylate CAS # 97-63-2, RCRA Code U118
- Characteristic of Ignitability: RCRA Code: D001

SARA Title III: Section 302:

This product contains no chemicals regulated under Sec. 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 a hazardous under the OSHA Hazard Communication Standard and is regulated under Section 311-312 (40 CFR 370). Its hazards are:

- Immediate (acute) health hazard
- Fire hazard

SARA Title III: Section 313:

This product contains the following substances 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): Inventory:

This product contains chemicals that are on the TSCA list.

State Regulations:	CA Right-to-Know Law:	Not Determined
	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

**AMERICAN INTERNATIONAL INDUSTRIES**

2220 GASPAR AVENUE
LOS ANGELES, CA 90040
CHEM-TEL: (800) 255-3924

MATERIAL SAFETY DATA SHEET

PRODUCT NAME:	IBD Tip Blender	DATE:	10/14/2004
FORMULA:	71201 (30-8956)	REV.	NEW

International Regulations:

CDSL: Canadian Inventory (on Canadian Transitional List):

Ethyl Methacrylate CAS# 97-63-2 is on the DSL List. WHMIS = B2, D2B

EINECS: European Inventory:

- Hazard Symbols: Xi, F: Irritant, Highly Flammable
- Risk Phrases: R11: Highly Flammable. R3/37/38: Irritating to eyes, respiratory system, and skin, R43: May cause sensitization by skin contact.
- Safety Phrases: S9: Keep container in a well ventilated place, S16: Keep away from sources of ignition-no smoking, S29: Do not empty into drains, S33: Take precautionary measures against static discharges, S36/37/39: Wear suitable protective clothing, gloves, and eye/face protection, S45: In case of accident or if you feel unwell, seek medical advise immediately (show label where possible).

Section 11. Regulatory Information

National Fire Protection Association (NFPA) Ratings:

Health: 2
Flammability: 3
Reactivity: 1

Hazardous Material Identification System (HMIS):

Health: 2
Flammability: 3
Reactivity: 1