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

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: FORMULA:	IBD Tip Blender 71201 (30-8956)				DATE: REV.	10/14/2004 NEW
Section 1. Materia	al Identification an	d Inform	ation			
Hazardous Ingredier						
	Componer		CAS #	%		OGICAL DATA
	Ethyl Methacr	ylate	97-63-2	> 99%	1 OSHA	TWA/STEL: 00ppm TWA/STEL: 00ppm
Section 2. Physic	cal / Chemical Cha	racterist	tics			
Boiling Point: Vapor Pressure:	244°F / 118°C 15 @ 20°C		Specific Gravity: (H ₂ O = 1)	0.918		
(mm Hg and Tempera	iture)		Melting Point:	N/A		
Vapor Density:	> 3.9		Evaporation Rate:	Not Determin	ned	
(Air = 1)			Water Reactive:	N/A		
Solubility in Water:	Insoluble		% Volatile:	99+		
Appearance: Odor:	Clear, Colorless Liqui Sharp Ester-Like Odc		(W/W%)			
Section 3. Fire a	nd Explosion Haza	rd Data				
Flash Point and Method Used: Auto-Ignition Temperature: Flammability Limits in Air % by Volume:		60°F / 16 771°F / 4 LEL:	6°C (Set-a-Flash) 411°C 1.80%			
-	-	UEL:	Not Determined			
Extinguisher Media: Special Fire Fighting Procedures:		Wear se may be i	arbon dioxide, or dry c If-contained breathing ineffective unless usec ne exposed containers	apparatus ar I as a fine spr	ay or fog. U	se water spray
						.

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

Unusual Fire and Explosion Hazards:

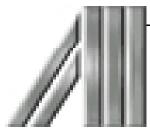
Stability: ☑ Stable Unstable Conditions to Avoid: Temperatures above 40°C, oxidizing or reducing agents, peroxides and amines, storage in absence of inhibitor, and inadvertent addition of catalyst.



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Incompatibility (Mat	terials to Avoid):					
	Reducing and oxidizir	g agents and UV light.				
Hazardous Decomp						
	Oxides of carbon whe	n burned.				
Hazardous Polymer						
	☑ May Occur	Will Not Occur				
Section 5. Healt	h Hazard Data					
Section 5. Health						
Primary Routes of E	ntrv:					
	☑ Inhalation	☑ Skin Absorption □	ngestion 🗹 I	Eye Contact		
Carcinogen Listed II	n:		-	-		
	□ NTP	5 1		Not Listed		
Health Hazards:	Eye Contact:	Vapor concentrations may cause in				
		eyes can cause irritation and possil	-			
	Skin Contact:	Liquid concentration may cause mo		•		
		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	on of the mouth, thr	oat and		
		respiratory tract and abdominal pai	n.			
	Sub-Chronic Effects:	Unlikely to present a cancer hazard	l in man.			
Emergency First Aid						
	Eye Contact:	Flush with water for 15 minutes, inc help if discomfort persists.	cluding under eyelid	s. Get medical		
	Skin Contact:	Wash thoroughly with soap and wa	ter. Remove contai	ninated clothing.		
		Get medical help if discomfort pers		-		
	Inhalation:	Remove to fresh air. If having brea				
		breathing has stopped, give artificia	al respiration. Get n	nedical help if		
	ha an a tha an	discomfort persists.	and the second second second	an at a d la c		
	Ingestion:	Rinse mouth out with water. Only i	-	-		
		physician. Never give anything by Seek prompt medical attention.				



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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)

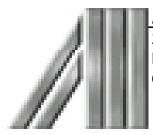
Hygienic Work Practices:

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 an 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 an 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.



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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.
Store in a cool, dry area. Keep container closed when not in use. Store at ambient temporatures out of direct cuplicate.

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 apace 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 Toxicit	iy:
	Dermal (Rabbit) LD50: > 10,000mg/kg
Acute Inhalation Tox	icity:
	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



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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 Infor	mation:	
	Biodegradability:	Not Determined
	Chemical Oxygen Demand:	Not Determined

Section 10. Transport Information

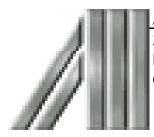
DOT (49CFR172):	Proper Shipping Name: Identification Number: Marine Pollutant: Special Provisions: Emergency Response Guidebook (ERG)#:	Ethyl Methacrylate, 3, UN2277, PGII UN2277 No T1 129P (possibly polymerization risk)
IATA (DGR):	Proper Shipping Name: Class or Division: UN or ID Number: Packaging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

Section 11. Regulatory Information

US Federal Regulations:

Clean Air Act: HAP/ODS:

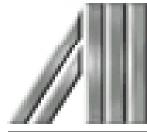
This product contains the following hazardous air pollutants (HAP) as defined by the U.S. Clean Air Act: None This product contains ODS.



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	Clean Water Act: Prior	ity Pollutant/Hazardous Substance: This product contains the following	•	d Hazardous	
		Substances as defined by the CW/None	A :		
	FDA: Food Packaging	Status:			
		This product has not been cleared and/or other applications as an ind		food packaging	
	Occupational Safety a	nd Health Act: This product is considered to be a Hazard Communication Standard, •Immediate (acute) health hazard •Fire hazard		inder the OSHA	
	RCRA:	This product contains chemicals counder RCRA (40 CFR 261): •Ethyl Methacrylate CAS # 97-63- •Characteristic of Ignitability: RCR	2, RCRA Code U118	dous waste	
	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 reextremely hazardous chemicals for ("CERCLA" List): Ethyl Methacrylate CAS # 97-63-2 	r emergency release r		
	SARA Title III: Section	 311-312: This product is considered to be a Communication Standard and is re CFR 370). Its hazards are: Immediate (acute) health hazard Fire hazard 			
	SARA Title III: Section	313: This product contains the following requirements of Section 313 of Titl and Reauthorization Act of 1986 at •None	e III of the Superfund	-	
	TSCA Section 8(b): In	ventory:			
		This product contains chemicals th	at are on the TSCA lis	st.	
State Regulations:	CA Right-to-Know Lav		# 07 63 2		
	MA Right-to-Know Law NJ Right-to-Know Law	, <u>,</u>			
	PA Right-to-Know Law	, <u>,</u>			
	FL Right-to-Know Law MN Right-to-Know Lav	Ethyl Methacrylate CAS			



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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 Syste	m (HMIS):
Health:	2
Flammability:	3
Reactivity:	1