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

MATERIAL SAFETY DATA SHEET

PRODUCT NAME:	**EzFlow High Definition Monomer Primerless**	**DATE:**	**1/6/2005**
FORMULA:	**30-2060**	**REV.**	**NEW**

Section 1. Material Identification and Information

Hazardous Ingredients:

Component	CAS #	%	TOXICOLOGICAL DATA
Ethyl Methacrylate	97-63-2	60-65%	OSHA TWA/STEL: N/E ACGIH TWA/STEL: N/E
Tetraethylene Glycol Dimethacrylate	109-17-1	10-15%	OSHA TWA/STEL: N/E ACGIH TWA/STEL: N/E
Ethylene Glycol Dimethacrylate Esters	97-90-5	10-15%	OSHA TWA/STEL: N/E ACGIH TWA/STEL: N/E
Triethylene Glycol Dimethacrylate Esters	109-16-0	6-10%	OSHA TWA/STEL: N/E ACGIH TWA/STEL: N/E
N,N-Dimethyl-p-toluidine	99-97-8	0-1%	OSHA TWA/STEL: N/E ACGIH TWA/STEL: N/E

Section 2. Physical / Chemical Characteristics

Boiling Point:	243^{o}F	**Specific Gravity:**	0.95
Vapor Pressure:	0.69kPa @ 38^{o}C	(@ 25^{o}C)	
(mm Hg and Temperature)		**Viscosity:**	Very Viscous
Vapor Density:	3.9	**Evaporation Rate:**	Not Determined
(Air = 1)		(Butyl Acetate = 1)	
Solubility in Water:	Not Determined	**Water Reactive:**	N/A
Appearance:	Clear, purplish-blue liquid	**pH:**	N/A
Odor:	Sharp Ester-Like	**% Volatile:**	99%+

Section 3. Fire and Explosion Hazard Data

Flash Point:	45^{o}C Tag Closed Cup
Auto-Ignition Temperature:	N/DA
Flammability Limits in Air % by Volume:	**LEL:** N/DA
	UEL: N/DA
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.

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Section 4. Reactivity Hazard Data

Stability: ☑ Stable ☐ 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.

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

Emergency Overview:

- ●Flammable liquid and vapor!
- ●May cause skin irritation.
- ●May cause skin irritation.
- ●Avoid prolonged or repeated breathing of gases, vapors, or mists.
- ●Please read entire MSDS for additional information.

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.
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.

Inhalation:	Remove to fresh air. If having breathing difficulty, give oxygen. If breathing has stopped, give artificial respiration. 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.

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.

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):

a NIOSH/MSHA approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain limited circumstanced 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. Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard 149.

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 clothing to prevent ANY contact with this product, such as gloves, apron, boots, or whole body suit. Neoprene and Nitrile rubber is better than PVC.

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 appropriate container or absorb with 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 of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802. EU Regulations require the consultation of Directive 98/24/EC. If a leak or

(800) 424-8802. EU Regulations require the consultation of Directive 98/24/EC. 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.

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 my 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 rapture 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
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

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 and 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. For EU Member States, please refer to any relevant Community provisions relating to waste. In their absence, it is useful to remind the user that national or regional provisions may be in force.

Section 11. Transport Information

DOT/ UN Shipping Name: UN 1993; Flammable liquid, n.o.s. Class 3, PG III
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.

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.
Characteristic of Ignitability, RCRA Code: D001

SARA Title III: Section 302 (TPQ)

This product contains no chemicals regulated under Section 302 as extremely hazardous substances that carry a TPQ.

SARA Title III: Section 304 (RQ):

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

EINECS: European Inventory:

●Ethyl Methacrylate (202-597-5): Hazard Symbol (CI 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 = 1/Flammability = 2/Reactivity = 1
HMIS: Health = 1/Flammability = 2/Reactivity = 1