



MATERIAL SAFETY DATA SHEET

Section 1. Product and Company Identification

Product Name:	EzFlow Primer	DATE:	12/2/2010
Formula:	30-3000	REV.	01
Item#:	60241		
Manufacturer:	American International Industries 2220 Gaspar Ave Los Angeles, CA 90040		
Chem-Tel:	(800) 255-3924		

Section 2. Composition / Information on Ingredients

Hazardous Ingredients:

Component	CAS #	%	Exposure Limits ppm	
			ACGIH TLV-TWA	OSHA
Methacrylic Acid	79-41-4	100	20ppm (70mg/3)	None Established

Section 3. Health Hazard Data

Emergency Overview:

Heat or product contamination may cause hazardous polymerization.
Reactive monomer.
Combustible liquid and vapor.
May cause blindness.
Causes severe burns to eyes, skin, lungs and all exposed tissues.
May be harmful if swallowed.
Corrosive.

Primary Routes of Exposure: Eye Contact, Skin Contact, Inhalation

Potential Health Effects:

Inhalation: Corrosive.
May cause burns resulting in permanent damage.
Inhalation may cause the following:
-coughing
-irritation of nose, throat and lungs
-difficulty breathing
Inhalation of high concentrations may cause the following:
-lung oedema

Eye Contact: Corrosive
May cause burns resulting in permanent damage.



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Skin Contact:	Corrosive. May cause burns resulting in permanent damage. Harmful if absorbed through the skin. Direct contact with material can cause the following: -liver and kidney damage
Ingestion:	Corrosive and may cause severe and permanent damage to mouth, throat and stomach.
Chronic Effects:	Possibility of liver damage. Possibility of kidney damage.
Potential Environmental Effects	See SECTION 12, Ecological Information

Section 4. First Aid Measures

Inhalation:	Remove to fresh air. Give artificial respiration if breathing has stopped. If breathing is difficult, give oxygen. Get immediate medical attention.
Eye Contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
Skin Contact:	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get immediate medical attention. Wash clothing before reuse. Destroy or thoroughly clean contaminated shoes before reuse.
Ingestion:	Do NOT induce vomiting. Have victim drink 8-10 ounces of water to dilute material in stomach. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Section 5. Fire Fighting Measures

Flash Point (°F/°C):	65°C / 149°F (DIN 51755)
Auto ignition Point:	370°C / 698°F (DIN 51794)
LEL %:	1.6% (V)
UEL%:	8.7% (V)

OSHA Flammability Classification: Combustible Liquid

Other Flammable Properties:	Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.
Unusual Hazards:	Heat can cause polymerization resulting in rupture of container.



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Extinguishing Media: Use the following extinguishing media when fighting fires involving this material: water spray - foam - dry chemical - carbon dioxide

Fire Fighting Procedures: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Containers can build up pressure if exposed to heat (fire). Cool with water spray.

Section 6. Accidental Release Measures

Procedures: Remove sources of ignition and ventilate area. Absorb spill with inert material and place in a chemical waste container. Obey relevant local, state, provincial and federal laws and regulations. After removal, flush contaminated area with water and collect for disposal. Clean up spills immediately. Contaminated monomer may be unstable. Add inhibitor to prevent polymerization. Do not contaminate any lakes, streams, ponds, groundwater or soil. Use personal protective equipment. See Material Safety Data Sheet 8, Exposure Controls/Personal Protection.

Section 7. Handling and Storage

Handling: Keep container tightly closed. Keep away from heat. Keep away from sparks, flames and other sources of ignition. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid ingestion of substances. Use with adequate ventilation. The need for grounding and bonding of containers in accordance with OSHA 29 CFR 1910.106 and NFPA 77 should be assessed for all product transfers. Follow all MSDS/label precautions even after the container is emptied because it may retain product residues. Wash thoroughly after handling. Product freezes at 15°C/59°F. Improper thawing can result in violent polymerization. Thaw frozen drums by placing them in heated room up to 40°C/104°F for 48 hours. DO NOT remove any material if stock is frozen or partially frozen. Mix during and after thawing to properly distribute inhibitor. NEVER use steam or electric heating bands. Contact a manufacturer of MAA before attempting to thaw a bulk container of frozen MAA.

Storage: Fill the container by approximately 90% as oxygen (air) is required for stabilization. With large storage containers make sure the oxygen (air) supply is sufficient to ensure stability. Do not store in direct sunlight. Maintain the temperature of the methacrylic acid between 18°C and approx. 35°C. The ideal storage temperature is 20-25°C. Depending on the weather situations, temperatures up to 40°C may be applied during transport. See Section 10, Conditions to Avoid, for additional information.

Section 8. Exposure Controls / Personal Protective Equipment

Exposure Limit Information: Methacrylic Acid (CAS No. 79-41-4)

Occupational Exposure Values:

ACGIH TLV-TWA	20ppm (70mg/m ³)
ACGIH TLV-STEL	not established
OSHA PEL-TWA	not established



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OSHA PEL-STEL	not established
OEL-TWA (Alberta)	20ppm (70mg/m3)
OEL-STEL (Alberta)	not established
OEL-TWA (British Columbia)	20ppm
OEL-STEL (British Columbia)	not established
OEL-TWA (Ontario)	20ppm (70mg/m3)
OEL-STEL (Ontario)	not established
OEL-TWA (Quebec)	20ppm (70mg/m3)
OEL-STEL (Quebec)	not established
OEL-TWA (Mexico)	not established
OEL-STEL (Mexico)	not established

Engineering Controls (Ventilation):

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

Respiratory Protection:

A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use. NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Eye Protection:

Use chemical splash goggles and face shield (ANSI Z87.1) or approved equivalent.

Skin Protection:

On handling of larger quantities: face mask, chemical-resistant boots and apron.

Hand Protection:

Butyl rubber gloves. Gloves should be replaced regularly, especially after extended contact with the product. For each workplace a suitable glove type has to be selected. Personal protective equipment that provides a barrier to prevent dermal exposure to this substance is required.

Other Protective Equipment:

To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product. A safety shower and eye wash fountain should be readily available.

Section 9. Physical and Chemical Properties

Appearance:	Colorless	Evaporation Rate:	is slower than butyl acetate
Physical State:	Liquid	Odor threshold:	0.032 - 0.17ppm
Odor:	Pungent	N-Octanol/water	log Pow 0.93 (measured)
Flash Point:	65°C / 149°F (DIN 51755)	partition	
pH-Value:	2 - 2.2 at 100 g/l at 25°C / 77°F	coefficient:	
Viscosity (dynamic):	1.4 mPa.s at 20°C / 68° (Brookfield)		
Specific Gravity:	1.015 g/cm3 at 20°C / 68° (H2O=1)		



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Vapor density: >1 at 20°C / 68° (air =1)
Vapor pressure: 0.8 hPa (=mbar) at 25°C / 77°F
Freezing Temperature: 15.8°C / 60.4°F
Boiling Temperature: 161°C / 322°F at 1,013 hpA (=mbar)

Solubility in Water Miscible at 24°C / 75°F
Solubility (qualitative) miscible with esters and ketones,
miscible with alcohols

Section 10. Stability and Reactivity

Stability: This product is stable under normal storage conditions.

Hazardous Decomposition Products:
None when used as directed.

Incompatibility With Other Materials:
Free radical initiators. Avoid contact with strong oxidizing and/or reducing agents.

Hazardous Polymerization:
The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is noticeably exceeded, the product may polymerize with heat evolution. Will not occur under normal conditions.

Conditions to Avoid: Avoid high temperatures and sources of ignition. Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions. Polymerization is also induced by light. Atmospheric oxygen saturation of acrylic/methacrylic monomers is necessary for stability. Ultraviolet light. If product solidifies the inhibitor separates from the methacrylic acid. Thaw SLOWLY without using direct heat. High temperatures may cause uninhibited methacrylic acid to polymerize. The inhibitor will redisperse once liquified.

Section 11. Toxicological Information

Acute Oral Toxicity: No data available.
Acute Inhalational Toxicity: No data available.
Acute Dermal Toxicity: No data available.

Irritation Effect on the Skin: No data available.

Irritant Effect on the Eyes: No data available.

Sensitization: No data available.



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Toxicity on Repeated Administration: No data available.

Mutagenicity: No data available.

Further Information on Toxicology: Carefully avoid contact with skin and eyes as well as inhalation of product vapors.

Section 12. Ecological Information

Information on Elimination (Persistence and Degradability)

Biodegradability: Readily degradable, OECD 301 D, GLP, 28 d

Exotoxicological Effect:

Fish Toxicity: No data available.

Daphnia Toxicity: No data available.

Algae Toxicity: No data available.

Bacteria Toxicity: No data available.

Futher Information on Ecology: Do not allow to enter soil, waterways or waste water.

Section 13. Disposable Considerations

Waste must be disposed of in accordance with federal, state and local regulatons. Incineration is the preferred method. Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Section 14. Transportation Information

US DOT Hazard Classification

Shipping Name: Methacrylic Acid, Stabilized
Hazard Class: 8
ID/UN Number: 2531
Packing Group: II

Canadian TDG Classification

Refer to the classification US DOT

Shipment by sea IMDG/GGVSee

UN Number 2531
Class 8
EmS F-A, S-B
Marine pollutant -



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Packaging group II
Proper Shipping Name: Methacrylic Acid, Stabilized

Air transport ICAO/IATA

UN number 2531
Class 8
Packing Group II
Proper Shipping Name: Methacrylic Acid, Stabilized

Section 15. Regulatory Information

INVENTORY INFORMATION:

EINECS (EU)	listed or exempted
TSCA (USA)	listed or exempted
DSL (CDN)	listed or exempted
AICS (AUS)	listed or exempted
METI (J)	listed or exempted
ECL (KOR)	listed or exempted
PICCS (RP)	listed or exempted
IECS (VR)	listed or exempted
HSNO (NZ)	listed or exempted

US FEDERAL REGULATORY INFORMATION:

<i>Component/CASRN</i>	<i>TPQ (lbs)</i>	<i>CERCLA RQ (lbs) (40CFR302.4)</i>	<i>SARA 302 List of EHS</i>	<i>SARA 313 (40CFRR372)</i>	<i>TSCA 12b</i>
methacrylic acid 79-41-4	None	None	No	No	No

COMPONENT CLASSIFICATION UNDER CLEAN AIR ACT SECTION 112

<i>Component/CASRN</i>	<i>Weight %</i>	<i>HAP</i>	<i>EHAP</i>
None			

PRODUCT CLASSIFICATION UNDER SECTION 311/312 OF SARA (40CFR370)

Acute, Fire, Reactive

US STATE REGULATORY INFORMATION:

<i>Component/CASRN</i>	<i>Massachusetts RTK</i>	<i>Pennsylvania RTK</i>	<i>New Jersey RTK</i>	<i>California Prop. 65 Cancer</i>	<i>California Prop. 65 Reproductive</i>
methacrylic acid 79-41-4	Yes	Yes	Yes	No	No

CANADIAN REGULATION:



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This product has been classified in accordance with the hazard criteria of the controlled Products Regulation and the MSDS contains all information required by the Controlled Products Regulations.

This is a controlled product.

WHMIS: B3, D1B, E, F

Component/CASRN	NPRI
methacrylic acid /	No
79-41-4	

Section 16. Other Information

	Health	Flammability	Physical Hazard
HMIS-Ratings	3	2	1
NFPA-Ratings	3	2	2

HMIS Hazard Ratings

4=severe

3=serious

2=moderate

1=slight

0=minimal

N=no rating for powders

*=chronic health hazard

NFPA Ratings

4=extreme

3=high

2=moderate

1=slight

0=insignificant

N=no rating for powders

This product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution. Caution: In case of thawing crystallised methacrylic acid do not use temperatures above 35°C. Strictly follow instructions of supplier