Kerr Italia SpA

MATERIAL SAFETY DATA SHEET

in accordance with communitary directive 2001/58/EC

Section I - Identification of Product and Company

Trade Product Name: **Belleglass HP Metal Prep**	Preparation/Revision Date: 12/03

Company Name: **Kerr Corporation**	**Emergency** phone: **(+41)-91-61.00.639**
Company Address: **1717 W.Collins Avenue Orange CA 92867 U.S.A.**	Information phone: **00-800-41-050-505**

Section II - Composition/Information on Ingredients

HAZARDOUS INGREDIENTS	%	SYMBOL	R	CAS N.	EINECS N.
Methyl Methacrylate Monomer	> 99	F, Xi	11-36/37/38-43	80-62-6	201-297-1

Section III - Hazards Identification

HAZARD CLASSIFICATION	Irritant; Highly flammable; Sensitizing

Section IV - First Aid Measures

Treatment for Eye Contact: **Immediately flush eyes with water for 15 minutes. Contact a physician.**

Treatment for Skin Contact: **Wash with soap and water.**

Treatment for Inhalation (Breathing): **Move to fresh air. Administer oxygen or give artifical respiration as required.**

Treatment for Ingestion (Swallowing): **In the unlikely event of ingestion, call a physician immediately and show this safety data sheet. For physician: give out a glass of paraffin oil. Inhalation of a small quantity of vomit containing material may cause lung damage. If gastrolysis occurs, it's better to intubate patient.**

Section V - Firefighting Measures

Suitable extinguishing media: **Chemical Foam, carbon dioxide, dry chemicals, water fog.**
Forbidden extinguishing media: **Water stream.**
Special fire fighting measures: **Fight fires from a safe distance. Cool exposed material with cold water spray. Vapors are heavier than air and may travel to ignition sources.**
Unusual fire and explosion hazards: **Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors are heavier than air and may travel to ignition sources.**

Special protection equipment: **Tinning overalls for liquids and gases; breathing apparatus.**

Section VI - Accidental Release Measures

Personal Precautions: **For high vapor concentration, evacuate area and eliminate ignition sources. Absorb spills with inert material and transfer to suitable container for disposal. Refer to precautional measures reported in sections VII and VIII.**
Environmental Precautions: **Material should not be allowed to drain to sewers.**
Reclaiming Methods: **Incinerate liquid in proper equipment (sand, earth, vermiculite, diatomaceous earth as absorbent materials). Dispose of in accordance with local regulations.**

Section VII - Handling and Storage

Handling Precautions: **Keep away from ignition sources. Handle in accordance with good personal hygiene and safety practices.**
Precautions in case of Fire and Explosion: **Vapors are heavier than air and may travel to ignition sources. Vapors may produce explosive mixtures with air. Product can be electrostatically charged. Use always with grounded equipments.**
Storage Conditions: **Store in a cool, dark place and in containers tightly closed. Keep away from ignition sources.**
Suggested container(s): **Store and handle in containers provided in package.**
Indication for Combined Storage: **Avoid contact with oxidizing, peroxides, catalyzers, amines and heavy metals compounds.**
Other Precautions: **Use according to directions.**

Section VIII - Exposure controls/personal protection

Precautionary Measures	Ventilation Local Exhaust Ventilation: **Sufficient to keep vapor concentration below 100 ppm.** Special Ventilation: **None.** Mechanical (General) Ventilation: **None.** Other Ventilation: **None.**
Limits	TWA: **100 ppm;** PEL: **100 ppm**
Respiratory Protection	**When vapor concentration exceeds 100 ppm: use self-contained breathing apparatus.**
Hands Protection	**Impervious gloves, neoprene type.**
Eyes Protection	**Safety glasses.**
Skin Protection	**Lab clothing.**
Other Protective Equipments:	**Eyewash.**

Section IX - Physical and Chemical Properties

Boiling Point: **100°C** Vapor Pressure: **28 mm Hg @ 20°C**	Melting Point: **-44,4°C** Specific Gravity: **0,95 g/ml**
Evaporation Rate (n-butane = 1): **3,1**	Vapor Density (air = 1): **3,6**
Solubility in Water: **1,6 g in 100ml**	

Appearance and Odor (Physical Form): **Colorless liquid with an acrid, fruity odor**.		
Flash Point: **9,4°C (TCC) (49°F)**	Upper explosivity limit: **12,5**	Lower explosivity limit: **2,1**

Section X - Stability and Reactivity

Stability: **Stable**
Conditions to avoid: **Heat and ignition sources.**
Incompatibility (Materials to Avoid): **Reducing and oxidizing agents. Material has strong solvent action and can soften paint and rubber**
Hazardous Decomposition Products: **Carbon monoxide, carbon dioxide, smoke.**
Hazardous Polymerization Products: **May occur**

Section XI - Toxicological Information

Carcinogenic\Teratogenic: **No**

Effects and Hazards of Overexposure (Acute and Chronic)

Effects and Hazards of Skin Contact: **Liquid or high vapor concentration may cause skin rashes**.

Effects and Hazards of Eye Contact: **Liquid or high vapor concentration may cause irritation.**

Effects and Hazards of Inhalation (Breathing): **Prolonged exposition may lead to headaches, nausea, drowsiness and unconsciousness**.

Effects and Hazards of Ingestion (Swallowing): **May cause gastro-intestinal distress**.

Effects for Prolonged Exposure: **A prolonged exposure to the product may cause strong headaches, neausea, unconsciousness, drowsiness and anorexia**.

Section XII - Ecological Information

There is no specific information on the product. Use according to good working practices, avoiding release of the product into environment.

Information on Methyl Methacrylate Monomer:

Biodegradability: Easily biodegradable (94%), OCSE 301 C, 14 d

Eco-toxicity effects

Air pollution: Threshold perceptibility of odor is about 5 ppm.

Aquatic toxicity: Valuation method WGK (from 0 to 3): 1 (German classification)

Bacterial CE_0 100mg/l (pseudomonas putida)

Fishes: CL_{50} > 79mg/l (oncorhynchus mykiss, iridea trout, OCSE 203, GLP, 96 hours)

Daphnia: CE_{50} 69mg/l (daphnia magna, OCSE 202, 48hrs);

NOEC 37mg/l (daphnia magna, OCSE 202 part II, sliding, 21 d)

Algas: CE_3 37mg/l (scenedesmus quadricauda, DIN 38412 part IX, 8 d

CE_{50} 170mg/l (selenastrum capricornutum, OCSE 201, 96 hours)

Section XIII - Disposal Considerations

If possible, collect material. Otherwise send to authorized dump or controlled incinerating in accordance with local regulations.

Section XIV - Transport Information

SEA TRANSPORTATION				
IMCO Number	3091			
UN Number	1247			
Substance(s) determining hazard	Methyl Methacrylate Monomer			
AIR TRANSPORTATION				
ICAO/IATA Class	3			
Substance(s) determining hazard	Methyl Methacrylate Monomer			
TRANSPORTATION BY ROAD/RAILWAY				
RID/ADR Class 3	Item Number 3°b	Hazard Identification Number 339	Substance Identification Number 1247	Hazard Label 3

Section XV - Regulatory Information

CLASSIFICATION IN ACCORDANCE WITH EC DIRECTIVES	
HAZARD IDENTIFICATION SYMBOL	**Xi**; **F**
R *Sentences*	
11	Highly flammable
36/37/38	Irritating to eyes, respiratory system and skin
43	May cause sensitization by skin contact
S *Sentences*	
3/7/9	Keep container in a well ventilated place
16	Keep away from sources of ignition - No smoking
29	Do not empty into drains
33	Take precautionary measures against static discharges
Ingredients determining the label	Methyl Methacrylate Monomer

Section XVI - Other Information

Methyl metacrylate monomer	LD_{50} (oral rat)	7872 mg/Kg
	LD_{50} (skin rabbit)	> 9400 mg/Kg
	LC_{50} (inhalation rat)	7093 ppm/4hours
N,N dimethyl p-toluidine	LD_{50} (oral rat)	212 mg/Kg

CAUTION: PRODUCT FOR PROFESSIONAL USE

The information on this Safety Sheet is based on presently available data and to our best knowledge for the correct handling of the product under normal conditions. Any use of this product in any way not indicated on this Sheet or the use of this product together with any other process/procedure will be exclusively under the user's responsibility.