

MATERIAL SAFETY DATA SHEET

SECTION I - IDENTIFICATION

MANUFACTURER: FRICKE DENTAL MFG. CO., INC. TRADE NAME: CROSSLINK MONOMER
FRICKE INTERNATIONAL, INC.
208 WEST RIDGE ROAD CHEMICAL NAME: METHYL METHACRYLATE
VILLA PARK, IL 60181 U.S.A. MONOMER (INHIBITED)
FLAMMABLE LIQUID UN 1247

INFORMATION: 630-833-2627
TRANSPORTATION: 800-535-5053 (INFOTRAC)

CAS NO: NE
HMIS H=2, F=3, R=2

SECTION II - HAZARDOUS AND NON HAZARDOUS INGREDIENTS

INGREDIENTS	%	TLV (UNITS)	PEL (UNITS)
METHYLY METHACRYLATE (MMA)	>90	100 PPM	100 PPM
HYDROQUINONE	<.001	2 mg/m ³	2 mg/m ³
ETHYLENE GLYCOL DIMETHACRYLATE	<10	NE	

SECTION 313 SUPPLIER NOTIFICATION

This product contains toxic chemicals subject to reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372

SECTION III - PHYSICAL DATA

APPROX. BOILING POINT: 101⁰C AT 780 mm Hg PERCENT VOLATILE: >95%
VAPOR DENSITY: (AIR=1) 3.5 VAPOR PRESSURE: 29 mm (20⁰C)
SOLUBILITY IN WATER: 1.6 GMS/100 GMS EVAPORATION RATE: (BuAc=1)
APPEARANCE AND ODOR: WATER CLEAR COLOR: ACRID FRUITY ODOR

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD): 51⁰F (TCC)
EXTINGUISHING MEDIA: FOAM, CARBON DIOXIDE, DRY CHEMICAL, WATER FOG (BY TRAINED PERSONNEL)
APPROX. FLAMMABLE LIMIT BY % VOLUME IN AIR: LEL 2.1%., UEL 12.5%
SPECIAL FIRE FIGHTING PROCEDURES: WEAR REPIRATOR-MSHA/NIOSH-APPROVED OR EQUIVALENT, SELF CONTAINED BREATING APPARATUS. USE COLD WATER SPRAY TO COOL CONTAINERS. HEAT CAN CAUSE CONTAINERS TO RUPTURE EXPLOSIVELY DUE TO POLYMERIZATION. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL TO IGNITION SOURCE.

SECTION V - HEALTH HAZARD DATA

ROUTE OF ENTRY: SYMPTOMS/EFFECTS OF EXPOSURE AND FIRST AID.
INGESTION: IF SWALLOWED, DO NOT INDUCE VOMITING, IMMEDIATELY GIVE TWO GLASSES OF WATER, OR ACTIVATED CHARCOAL SLURRY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. CALL A PYSICIAN. INHALATION: OVEREXPOSURE MAY CAUSE EYE, NOSE, AND THROAT IRRITATION. MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, HEADACHE, NAUSEA, AND LOSS OF CONSCIOUSNESS. REMOVE TO FRESH AIR. IF HAVING DIFFICULTY BREATHING, ADMINISTER OXYGEN. IF NOT BREATHING ADMINISTER ARTIFICIAL RESPIRATION. CALL A PHYSICIAN. UNDER SOME CIRCUMSTANCES, MUTAGENIC CHANGES HAVE BEEN OBSERVED WITH MMA. THE MEANING AND SIGNIFICANCE OF THESE RESULTS IS NOT UNDERSTOOD. AT 1000 PPM, IS WEAKLY EMBRYOTOXIC WITH RATS.
SKIN OR EYE CONTACT: VAPOR MAY CAUSE IRRITATION OF THE EYES, LIQUID MAY CAUSE CORNEAL INJURY. REPEATED OR PROLONGED CONTACT MAY CAUSE ALLERGIC SKIN RASH, ITCHING, SWELLING, POTENTIAL SKIN SENSITIZER. IN CASE OF EY CONTACT, FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES: CALL A PHYSICIAN. IN CASE OF SKIN CONTACT, WASH WITH SOAP AND WATER. IF IRRITATION OCCURS, CALL A PHYSICIAN.

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SECTION VI - REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID: HEAT AND IGNITION SOURCES. CONTAMINATION

INCOMPATIBILITY: REDUCING AND OXIDIZING AGENTS, MATERIAL HAS STRONG SOLVENT PROPERTIES AND CAN SOFTEN PAINT OR RUBBER.

HAZARDOUS DECOMPOSITION: CAN YIELD CO, CO₂, SMOKE

HAZARDOUS POLYMERIZATION: MAY OCCUR

CONDITIONS TO AVOID FOR HAZARDOUS POLYMERIZATION: EXCESSIVE HEAT, (TEMPERATURES ABOVE 40°C), PEROXIDES, AMIDES AND OTHER OXIDIZING OR REDUCING AGENTS.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: EVACUATE AREA. REMOVE SOURCES OF IGNITION. PREVENT SKIN CONTACT AND BREATHING OF VAPOR. CONFINE AND REMOVE WITH INERT ABSORBENT. VENTILATE AREA.

WASTE DISPOSAL METHOD: EPA LISTED HAZAROUS WASTE UNDER RCRA (U-162). DO NOT ALLOW MATERIAL TO CONTAMINATE GROUND WATER SYSTEMS. INCINERATE IN A FACILITY WITH COMPLIES WITH FEDERAL, STATE AND LOCAL REQUIREMENTS. DO NOT INCINERATE IN CLOSED CONTAINERS.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY: WHEN LEVELS EXCEED 100 PPM, WEAR SELF CONTAINED BREATHING APPARATUS.

VENTILATION: PROVIDE SUFFICIENT VENTILATION TO KEEP LEVELS BELOW 100 PPM.

PROTECTIVE GLOVES: NEOPRENE GLOVES ARE RECOMMENDED.

EYE PROTECTION: SPLASHPROOF GOGGLES.

OTHER PROTECTIVE EQUIPMENT: NEOPRENE BOOTS AND COVERALLS. EYEWASH AND EMERGENCY SHOWER SHOULD BE AVAILABLE.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: OBSERVE LABEL PRECAUTIONS. KEEP AWAY FROM HEAT, DIRECT SUNLIGHT, SPARKS AND FLAME. CLOSE CONTAINER AFTER EACH USE. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR SMOKING.

SECTION X - NOTES

THIS PAGE IS TO BE USED AS A GENERAL REFERENCE FOR ALL MONOMERS AND IS THE SAME FOR EACH. THE DATA IN THESE MATERIAL SAFETY DATA SHEETS RELATE ONLY TO THE MATERIALS DESIGNATED HEREIN AND DOES NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL OR ANY PROCESS.