



TRIANGLE BIOMEDICAL SCIENCES, INC.

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MATERIAL SAFETY DATA SHEET

IDENTIFICATION AND EMERGENCY INFORMATION						
Product Name	Shur/Mark Laboratory Marker, Red					
Product Code (Catalog Number)	MP-R (Catalog number change only-previously H-MP-R)					
Product Category (Chemical Name)	Solvent base ink					
Product Appearance and Odor	thin red liquid with mildly pungent odor					
Emergency Notification	Chem-Tel 1-800-255-3924					
COMPONENTS AND HAZARD INFORMATION						
Component	CAS No.	%	OSHA TWA		OSHA STEL	
			ppm	mg/m ³	ppm	mg/m ³
cyclohexanone	108-94-1	18	25	NE	NE	NE
methyl isobutyl ketone	108-10-1	64	50	NE	NE	NE
red pigment	2786-76-7	10	NE	2*	NE	NE
vinyl resin	25086-48-0	8	NE	15*	NE	NE
* "free dust" not bound in paint/ink matrix						
PHYSICAL DATA						
THE FOLLOWING DATA ARE APPROXIMATE OR TYPICAL VALUES AND SHOULD NOT BE USED FOR PRECISE DESIGN PURPOSES.						
Boiling Range 241°F (116°C) – 312°F (155°C)	Specific Gravity <1.0	Molecular Weight		Viscosity		
Percent Volatile by Volume 75	Vapor Pressure @20 C degrees 15	Vapor Density (Air = 1) 3.4		Pour, Congealing or Melting Point NA		
Solubility in Water @1 ATM and 25°C (77°F) nil		Evaporation Rate @1 ATM and 25°C (77°F) (n-Butyl Acetate =1) slower than ether			pH	
FIRE AND EXPLOSION HAZARD INFORMATION						
Flash Point (Minimum) 74°F	Autoignition Temperature		Test Mode	LEL 1%	UEL 9%	
Handling Precautions						

NA = not applicable

NL = not listed

NE = not established

NNR = not normally required

Flammable or Explosive Limits (Approximate Percent by Volume in Air)
Extinguishing Media foam, CO ₂ , dry chemical, water spray
Fire Fighting Procedures NNR
Decomposition Products Under Fire Condition
“Empty” Container Warning
Unusual Fire and Explosion Hazards NA
HEALTH AND HAZARD INFORMATION
Variability Among Individuals
Signs and symptoms of overexposure headache, dizziness, nausea, anesthesia, coughing, eye, throat irritation
Effects of Overexposure slight to severe irritation to eyes and mucous membranes of nose and throat, dermatitis, affects central nervous system
Nature of Hazard and Toxicity Information
Pre-existing Medical Conditions which may be Aggravated by Exposure
Threshold Limit Value
Health Hazards
PRIMARY ROUTES OF ENTRY AND EMERGENCY AND FIRST AID PROCEDURES
Eye Contact
Skin wash with copious amounts of water
Inhalation seek fresh air, give artificial respiration if not breathing
Ingestion call physician
SEEK MEDICAL TREATMENT IF DISCOMFORT PERSISTS.

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REACTIVITY		
Stability stable	Incompatibility do not mix with strong oxidants	Hazardous Decomposition Products carbon monoxide, carbon dioxide, and unidentified organic combustion products
Conditions to Avoid heat, open flame, and sparks	Hazardous Polymerization will not occur	Materials to Avoid
ENVIRONMENTAL INFORMATION		
Steps to be Taken in Case Material is Released or Spilled Remove all ignition sources, ventilate area, use absorbent material to clean spill.		
Disposal Dispose of waste in accordance with local and federal regulations.		
Protective Gear NNR		
Precautions to be taken in handling and storage Keep away from heat, fire and strong oxidants. Store in cool place (room temperature). Use adequate ventilation.		
THE FOLLOWING INFORMATION MAY BE USEFUL IN COMPLYING WITH VARIOUS STATE AND FEDERAL LAWS AND REGULATIONS UNDER VARIOUS ENVIRONMENTAL STATUTES.		
Reportable Quantity (RQ), EPA Regulation 40 CFR 302 (CERCLA Section 102)		
Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355 (SARA Sections 301-304)		
Toxic Chemical Release Reporting, EPA Regulation 40 CFR 372 (SARA Section 313)		
Hazardous Chemical Reporting, EPA Regulation 40 CFR 370 (SARA Sections 311-312)		
SPECIAL STATE NOTIFICATIONS		
PROTECTION AND PRECAUTIONS		
None normally needed.		
TRANSPORTATION AND OSHA RELATED LABEL INFORMATION		
Transportation Incident Information		
U.S. DOT Hazardous Materials Shipping Description UN1210 – flammable liquid		

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OSHA Required Label Information**WHMIS (Canada only)****B3**

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