

Material Safety Data Sheet

May be used to comply with
 OSHA's Hazard Communication Standard,
 29 CFR 1910.1200. Standard must be
 Consulted for specific requirements.

U.S. Department of Labor

Occupational Safety and Health Administration
 (Non-Mandatory Form)
 Form Approved
 OMB No. 1218-0072

IDENTITY (As Used on Label and List) SFRMA1 Flux Pen	<i>Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.</i>
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Section I	
Manufacturer's Name Metron Marker, Division of Metron Optics, Inc	Emergency Telephone Number 858-755-4477
Address (Number, Street, City, State, and Zip Code) 819 Academy Drive	Emergency Telephone Number
Solana Beach, CA 92075	Date Prepared (mm-dd-yy) Jan-01-2012
	Signature of Preparer (Optional)

SECTION II — Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH-TLV	Other Limits (Recommended)	% (Optional)
Rosin acids—colophony	CAS NO 8050-09-7			10.000-30.000
2-Propanol	CAS NO 67-63-0			30.000-60.000
Diethylene Glycol Monobutyl Bt	CAS NO 112-34-5			10.000-30.000
Kerosene	CAS NO 8008-20-6			1.000-5.000
Melamine Copolymer Resin	No CAS Number			

SECTION III — Physical/Chemical Characteristics

Boiling Point 150° F—65° C		Specific Gravity (H ₂ O = 1) At 25° C	.86
Vapor Pressure (mm Hg.) At 20° C	33	Melting Point N/D F—N/D C	
Vapor Density (AIR = 1)	2.07	Evaporation Rate (Butyl Acetate = 1)	1.7
Solubility in Water Partially			
Appearance and Odor Liquid with alcohol odor.			

SECTION IV—Fire and Explosion Hazard Data

Flash Point (Method Used) 62° F - 16.66° C (ACC)	Flammable Limits	LEL	UEL
Extinguishing Media Carbon dioxide, dry chemical, foam.			
Special Fire Fighting Procedures Recommended use of self contained breathing apparatus (SCBA).			
Unusual Fire and Explosion Hazards Heat in excess of flashpoint, open flame or storage with incompatible materials.			

SECTION V—Reactivity Data			
Stability	Unstable		Conditions to Avoid: High temperatures, open flames, sparks, oxidizing conditions and ignition sources.
	Stable	X	High temperatures, open flames, sparks, oxidizing conditions and ignition sources.
Incompatibility (Materials to Avoid) Strong oxidizing agents.			
Hazardous Decomposition or Byproducts Carbon dioxide, Carbon monoxide, Rosin core solder decomposition products as resin acids colophony.			
Hazardous Polymerization	May Occur		Conditions to Avoid
	Will not Occur	X	
SECTION VI —Health Hazard Data			
Route(s) of Entry: <u>Inhalation?</u> Skin? Ingestion?			
Health Hazards (Acute and Chronic) Eye Contact: Liquid or vapor contact can cause irritation. Skin contact: Prolonged and repeated contact can cause dryness and irritation. Inhalation: Irritate the nose and throat and respiratory tract. Very High concentrations may cause symptoms of intoxication. Ingestion: Harmful if swallowed, causes vomiting, abdominal pain, drowsiness and loss of consciousness.			
Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?			
No Ingredients listed as carcinogens.			
Signs and Symptoms of Exposure Irritation, headache, dizziness, nausea, drowsiness and loss of consciousness.			
Medical Conditions Generally Aggravated by Exposure None Presently known.			
Emergency and First Aid Procedures Eye contact: Flush with water for 15 minutes. Get medical attention. Skin contact: Rinse with plenty of water, remove contaminated clothing and shoes. Inhalation: Remove victim to fresh air. Give artificial respiration if not breathing. Get medical attention. Ingestion: DO NOT induce vomiting. Give large amounts of water to drink. Get medical attention.			
SECTION VII —Precautions for Safe Handling and Use			
Step to Be Taken in Case Material is Released or Spilled Contain spill in natural form or with sand or dirt (inert material). Eliminate all ignition sources.			
Waste Disposal Method Shovel or scrape (non-metallic) absorbed waste materials into disposal container. Seal lid tightly with tape or locking ring and label properly.			
Precautions to Be Taken in Handling and Storing Keep away from heat, spark, and open flame. Use adequate ventilation. Ground and bond as appropriate.			
Other Precautions Store away from sources of ignition, strong oxidizing agents and reactive metals such as aluminium, zinc, and their alloys.			
SECTION VIII —Control Measures			
Respiratory Protection (Specify Type) If exposure exceeds limits use a NIOSH-approved respirator.			
Ventilation	Local Exhaust	Recommended	Special
	Mechanical (General)	Acceptable	Other
Protective Gloves	Impermeable gloves	Eye Protection	Chemical goggles, face shields.
Other Protective Clothing or Equipment Wear protective clothing to prevent skin contact.			
Work/Hygienic Practices Wash with soap and water before eating, drinking, smoking, or using toilet facilities.			