Item No.: 2100, 2101

565 Eagle Rock Avenue Roseland, NJ 07068

Formula:

ITW Mark-Tex

B

#7Wmark-tex

Identity: Metal Plate Image Additioner

Product Class: Solvent based marker.

Other Names: Image Additioner

Another Exclusive Product of:

SECTION 1 CHEMICAL PRODUCT AND COMPAN

Address (Number, Street, City, State, and ZIP Code)

FLAMMABILITY

2 PERSONAL PROTECTION

Y IDE	NTIFICATION
	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.
	Emergency Telephone Number
	800-424-9300 (Chemtrec)
	Telephone Number for Information
	800-443-9536
	Date Prepared
	1/17/03

Signature of Preparer (Optional)

Regulatory Dept.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Other Limits					
Chemical Identity, Common Name(s)	CAS No.	OSHA PEL	ACGIH-TLV	Recommended	%(Opt.)
Ethyl Alcohol	64-17-5	No data	TWA 1900 ppm	No data	20 - 30
Phenolic Resin	9003-35-4	No data	No data	No data	15 - 25
Acetone	67-64-1	No data	TWA 200 ppm	No data	15 - 25
Synthetic dyestuff	1325-66-6	No data	No data	No data	10 - 20

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Water White thin viscosity liquid with pungent odor. Warning! Combustible liquid and vapor. Keep away from heat sparks and flames. If swallowed do not induce vomiting. Get immediate medical attention. Do not get on skin, in eyes, taste or swallow. Keep container tightly closed. Use only with adequate ventilation. Wash thoroughly after handling.

POTENTIAL HEALTH EFFECTS

Eyes: Liquid is moderately irritating to the eyes. **Skin:** Liquid is mildly irritating to the skin.

Ingestion: Ingestion of liquid may cause vomiting.

Inhalation: High concentration of vapors may produce irritation of the respiratory tract, headache, dizziness, and nausea.

CHRONIC HEALTH EFFECTS

Prolonged or repeated contact may cause skin sensitization or dermatitis. Reports have associated repeated and prolonged occupational overexposure to solvents with irreversible brain and nervous system damage. Intentional misuse by deliberately concentrating or inhaling this product may be harmful or fatal.

SECTION 4 FIRST AID MEASURES

Eyes – Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Inhalation – Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Skin – Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention immediately. Remove and wash contaminated clothing and shoes before reuse.

Ingestion – DO NOT induce vomiting. Get immediate medical attention. If victim is conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

- 1- Formula:

SECTION 5 FIRE FIGHTING MEASURES					
Flash Point (Method Used)	Flammable Limits	LEL	UEL		
133 °F		2.6	10.0		

Extinguishing Media -

Use water fog, foam, dry chemical or CO2. Use water spray to cool fire-exposed containers and to protect personnel.

Special Fire Fighting Procedures -

Keep containers cool and vapors down with water spray. Prevent spill from entering drains, sewers, streams or other bodies of water. If run-off occurs, notify proper authorities. Do not enter confined fire space without full bunker gear (helmet with face shield, bunker coats, gloves and rubber boots), including a positive pressure NIOSH approved self-contained breathing apparatus.

Unusual Fire and Explosion Hazards – Vapors are heavier than air and may travel along ground, or be moved by ventilation and be ignited by ignition source.

SECTION 6 ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Absorb liquid with non-combustible floor absorbent and place in non-leaking container; seal properly and dispose of properly in compliance with federal, state, and local regulations.

LARGE SPILL: Evacuate area of unprotected personnel. Eliminate all ignition sources. Stop spill at source if safe to do so. Handling equipment must be grounded to prevent sparking. Prevent spill from entering drains, sewers, streams or other bodies of water. If run-off occurs, notify proper authorities. Pump or vacuum transfer spilled product to clean containers for recovery. Absorb unrecoverable product. Transfer contaminated absorbent, soil and other materials to containers for disposal. Dispose of properly in compliance with federal, state, and local regulations.

SECTION 7 HANDLING AND STORAGE

HANDLING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, sparks, flames, static electricity, or other sources of ignition. Many hot organic chemical vapors or mists are susceptible to sudden spontaneous combustion when mixed with air. Ignition may occur at temperatures below those published in the literature as "autoignition" or ignition temperatures. Ignition temperatures decrease with increasing vapor volume and vapor volume and vapor/air contact time, and are influenced by pressure changes. Ignition of organic chemical vapors may occur at typical elevated-temperature process conditions, especially in processes operating under vacuum if subjected to sudden ingress of air, or outside process equipment operating under elevated pressure if sudden escape of vapors or mists to the atmosphere occurs. Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

STORAGE:

Keep away from heat, sparks and open flames. Keep out of reach of children. Keep container tightly sealed when not in use. Store in cool, well-ventilated place away from incompatible materials. Information on this Material Safety Data Sheets refers to ink used in pens and markers, however, it applies to these inks in bulk. The inks are contained in capillary or valve reservoirs and will not spill or leak under normal conditions.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Type) -

Not usually necessary. Use with adequate ventilation. Use NIOSH/MSHA approved respirator if PELs or TLVs are exceeded.

	J 1		11 1		
Engineering	Local Exhaust	Not usually needed	Special	None	
Controls	Mechanical (General)	Yes	Other	None	
Protective Gloves – Chemical resistant gloves (consult your			rotection – Not normal	ly required if used as intended.	
safety equipment supplier).		Wear	Wear chemical splash goggles in compliance with OSHA		
			tion if enlaching is noce	ible	

Other Protective Clothing or Equipment -

Not usually necessary. For bulk material, if direct contact is possible, wear apron, boots, face shield, etc. as needed.

Work/Hygienic Practices -

Follow label instructions. Wash hands after use and before eating, drinking, smoking, using restrooms, etc.

- 2 - Formula:

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES					
Boiling Point		Specific Gravity (H ₂ O = 1)			
	214 ^o F	@70° F	<1		
Vapor Pressure (mm-Hg @ 70° F)		Melting Point			
	No Data		No Data		
Vapor Density (AIR = 1)	Greater than	Evaporation Rate (Butyl Acetate = 1)	Less than		
	one (1)		one (1)		
Solubility in Water	Partial	pH			
-			7		

Appearance and Odor – Water White thin viscosity liquid with pungent odor.

SECTION 10 STABILITY AND REACTIVITY

Chemical	Unstable		Conditions to Avoid – None known.	
Stability	Stable	X		
T 411 1114	T (*1.11*) (*A# 4 * 1.4 A * 1)			

Incompatibility (Materials to Avoid) -

Strong oxidizing and reducing agents, strong alkalies and strong acids.

Hazardous Decomposition or Byproducts -

Carbon dioxide, carbon monoxide, smoke, soot and various organic oxidation by-products.

Hazardous	May Occur		Conditions to Avoid - No data
Polymerization	Will Not	X	
	Occur		

SECTION 11 TOXICOLOGICAL INFORMATION

Please refer to Section 3 for available information on potential health effects.

SECTION 12 ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal regulations.

SECTION 14 TRANSPORT INFORMATION (Not meant to be all inclusive)

Domestic Highway (Containers < 1 Quart are ORM-D)	Domestic Air Shipments (Pens)
Proper Shipping Name: Marker	Proper Shipping Name: Consumer Commodity
Hazard Class/Subsidiary Hazard: 3	Hazard Class/Subsidiary Hazard: 9
UN/NA No.: UN1263	UN/NA No.: I.D. 8000
Packing Group: III	Packing Group: None
Label Required: Combustible Liquid (3)	Label Required: Class 9

SECTION 15 REGULATORY INFORMATION (Not meant to be all inclusive - selected regulations represented)

U.S. FEDERAL REGULATIONS:

Carcinogenicity: NTP? IARC Monographs? OSHA Regulated?
No No No No

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

SECTION 313: This product contains Ethyl Alcohol (64-17-5), which is listed and may require reporting under SARA Title III Sec. 313 if used over the threshold reporting quantity. This information must be included in all MSDSs that are copied and distributed for this material.

INTERNATIONAL REGULATIONS:

CANADIAN WHMIS: Not WHMIS controlled (pens) Bulk: Class B2, D2A

STATE REGULATIONS:

CALIFORNIA PROPOSITION 65: This product is not known to contain any material listed under California's Proposition 65.

- 3- Formula:

SECTION 16 OTHER INFORMATION

MSDS Status: Revised Section(s):

WARNING! The use of this product is beyond the control of the manufacturer and distributor; therefore, no guarantee, expressed or implied, is made as to the effects of such or the results to be obtained if not used in accordance with directions or established safe practice. The user must assume all responsibility, including injury or damage, resulting from its misuse as such, or in combination with other materials. The manufacturer and distributor warrant only that this product meets the specifications for such product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AS TO DESCRIPTION, QUALITY, MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, PRODUCTIVENESS, OR ANY OTHER MATTER OF THIS PRODUCT. THE MANUFACTURER AND DISTRIBUTOR SHALL BE IN NO WAY RESPONSIBLE FOR THE IMPROPER USE OF THIS PRODUCT. The sole and exclusive remedy against the manufacturer and distributor for breach of warranty shall be reimbursement of the purchase price of the product in the event that a defective condition of the product shall be found to exist. NO OTHER REMEDY (INCLUDING BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR INJURY TO PERSON OR PROPERTY OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS) SHALL BE AVAILABLE.

- 4 - Formula: