

Material Safety Data Sheet

HMIS®

HEALTH

2

REACTIVITY

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FLAMMABILITY

2

PERSONAL PROTECTION

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SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identity: Hi Temperature HG Green Item No.: 17040,17043,17044 Other Names: Texpen Formula: ER181	<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>
Another Exclusive Product of: ITW Mark-Tex	Emergency Telephone Number 800-424-9300 (Chemtrec)
Address (Number, Street, City, State, and ZIP Code) 565 Eagle Rock Avenue Roseland, NJ 07068	Telephone Number for Information 800-443-9536
Product Class: Solvent based marker.	Date Prepared 6/03/02
	Signature of Preparer (Optional) Regulatory Dept.

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS No.	OSHA PEL	ACGIH-TLV	Other Limits	
				Recommended	%(Opt.)
Aromatic Hydrocarbon	64742-95-6	TWA 100 ppm	TWA 100 ppm	No data	20 - 30
Hydrocarbon Resin	9003-55-8	TWA 15 mg/m3	TWA 10 mg/m3	Nuisance dust	20 - 25
Zinc Borosilicate Frit	65997-18-4	TWA 5 mg/m3	TWA 5 mg/m3	Nuisance dust	15 - 25
Chromic Oxide	1308-38-9	TWA 0.5 mg/m3	TWA 0.5 mg/m3	Nuisance dust	15 - 25
Xylene	1330-20-7	TWA 100 ppm	TWA 100 ppm	No data	1 - 10
Clay , Silica	1332-58-7	TWA 15 mg/m3	TWA 15 mg/m3	Nuisance dust	1 - 10
1,2,4, Trimethyl Benzene	95-63-6	TWA 100 ppm	TWA 100 ppm	No data	1 - 10

Nuisance dust as free dust only, not as bound in paint or ink.

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Green opaque thick viscosity liquid with aromatic odor. Warning! Combustible liquid and vapor. Keep away from heat sparks and flames. May cause eye, skin and respiratory tract irritation. If swallowed do not induce vomiting. Get immediate medical attention.

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. IARC (International Agency for Research of Cancer) has classified Cobalt and Cobalt compound as a possible human carcinogen (2B).

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 – Flush skin with plenty of water. Remove contaminated clothing and shoes.

Ingestion – If large quantities of this material are swallowed, get immediate medical attention. Do not induce vomiting. Never give anything by mouth to an unconscious person.

SECTION 5 FIRE FIGHTING MEASURES

Flash Point (Method Used) 108 F	Flammable Limits	LEL 1.9	UEL 12.6
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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.

Engineering Controls	Local Exhaust	Not usually needed	Special	None
	Mechanical (General)	Yes	Other	None

Protective Gloves – Chemical resistant gloves if skin contact is possible (consult your safety equipment supplier).

Eye Protection – Not normally required if used as intended. Wear chemical splash goggles in compliance with OSHA regulation if splashing is possible.

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.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point	318 to 338 ^o F	Specific Gravity (H₂O = 1) @70 ^o F	>1
Vapor Pressure (mm-Hg @ 70^o F)	No Data	Melting Point	No Data
Vapor Density (AIR = 1)	Greater than one (1)	Evaporation Rate (Butyl Acetate = 1)	Less than one (1)
Solubility in Water	Negligible	pH	No Data

Appearance and Odor – Green opaque thick viscosity liquid with aromatic odor.

SECTION 10 STABILITY AND REACTIVITY

Chemical	Unstable		Conditions to Avoid – None known.
Stability	Stable	X	

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

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: Ink/Paint	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 (2)	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	2B	No

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

SECTION 313: This product contains Xylene (1330-20-7) Chromic Oxide (1308-38-9) and 1,2,4, TriMethyl Benzene (95-63-6), which are 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
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STATE REGULATIONS:

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

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.