HMIS®

REACTIVITY

0

В

IT W mark-tex FLAMMABILITY

2 3

PERSONAL PROTECTION

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION				
Identity: Degrease Resistant Yellow	Note: Blank spaces are not permitted. If any item is not			
Item No.: 91401,44401	applicable, or no information is available, the space must be			
Other Names: 916, AM-44	marked to indicate that.			
Formula: Z401				
Another Exclusive Product of:	Emergency Telephone Number			
ITW Mark-Tex	800-424-9300 (Chemtrec)			
Address (Number, Street, City, State, and ZIP Code)	Telephone Number for Information			
565 Eagle Rock Avenue	800-443-9536			
Roseland, NJ 07068	Date Prepared			
	06/03/02			
Product Class: Solvent based marker.	Signature of Preparer (Optional)			
	Regulatory Dept.			

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

HEALTH

Hazardous Components (Specific				Other Limits	
Chemical Identity, Common Name(s)	CAS No.	OSHA PEL	ACGIH-TLV	Recommended	%(Opt.)
Methyl Isobutyl Ketone	108-10-1	TWA 50 ppm	TWA 50 ppm	No Data	65 - 75
Cyclohexanone	108-94-1	TWA 25 ppm	TWA 25 ppm	No data	15 - 25
Vinyl terpolymer	25086-48-0	TWA 15 mg/m3	TWA 10 mg/m3	Nuisance dust	5 - 10
Titanium Dioxide	13463-67-7	TWA 10 mg/m3	TWA 10 mg/m3	Nuisance dust	1 - 5
Pigment Yellow 83	5567-15-7	TWA 15 mg/m3	TWA 10 mg/m3	Nuisance dust	1 - 5

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

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW – Yellow thin viscosity liquid with mild pungent odor. Warning! Flammable 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.

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 MEAS	SURES		
Flash Point (Method Used)	Flammable Limits	LEL	UEL
60 F (Tag closed cup)		1.2	8
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/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 nece	ssary. Use with adequate ventilation	. Use NIOSH/MSHA	approved respirator if PELs or TLVs	are exceeded.
Engineering	Local Exhaust	Not usually needed	Special	None

Controls	Mechanical (General)	Yes	Other	None	
Protective Glov	es – Chemical resistant gloves if sk	tin contact is	Eye Protection – Not normally required if used as intended.		
possible (consult your safety equipment supplier).			Wear chemical splash goggles in compliance with OSHA		
		1	regulation if splashing is p	ossible.	
possible (consult your safety equipment supplier).			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		Specific Gravity ($H_2O = 1$)	
-	243 ^o F	@70 ^o F	<1
Vapor Pressure (mm-Hg @ 70 ⁰ F)		Melting Point	
	No Data		No Data
Vapor Density (AIR = 1)	Greater than	Evaporation Rate (Butyl Acetate = 1)	1.6
	one (1)		
Solubility in Water	Moderate	рН	
			No Data

Appearance and Odor – Yellow thin viscosity liquid with mild pungent odor.

SECTION 10 STABILITY AND REACTIVITY				
Chemical	Unstable		Conditions to Avoid – None known.	
Stability	Stable	Х		
Incompatibility	(Materials to Av	oid) -		
Strong oxidizing	and reducing ager	nts, strong	g alkalies and strong acids.	
	mposition or By			
Carbon dioxide, o	carbon monoxide,	smoke, s	soot and various organic oxidation by-products.	
Hazardous	May Occur		Conditions to Avoid - No data	
Polymerization	Will Not	Х		
	Occur			
SECTION 11 T	OXICOLOGICA	L INFO	PRMATION	
Please refer to Se	ction 3 for availab	ole inform	nation on potential health effects	
SECTION 12 E	COLOGICAL IN	FORM	ATION	
No specific ecolo	gical data are ava	ilable for	r this product. Please refer to Section 6 for information regarding accidental releases	
and Section 15 fc	or regulatory report	ting info	ormation.	
SECTION 13 D	ISPOSAL CONS	IDERA	TIONS	
Dispose of in acc	ordance with all a	pplicable	e local, state and federal regulations.	
			TION (Not meant to be all inclusive)	
	Domestic Highway (Containers < 1 Quart are ORM-D)		Proper Shipping Name: Consumer Commodity	
Proper Shipping Name: Paint Hazard Class/Subsidiary Hazard: 3		1. 2	Hazard Class/Subsidiary Hazard: 9	
UN/NA No.: UN	^v	. 3	UN/NA No.: I.D. 8000	
Packing Group:		:1(2)	Packing Group: None	
Label Required: Flammable Liquid (3)		10 (5)	Label Required: Class 9	

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

U.S. FEDERAL REGULATIONS: Carcinogenicity: NTP?

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Regulations?	
	No	No	No	
OSHA: Hazardous by d				

SECTION 313: This product does not contain toxic chemicals that 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

STATE REGULATIONS:

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

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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.