MATERIAL SAFETY DATA SHEET

PRODUCT NAME: WATERBASE RETARDER HMIS CODES: H F R P

PRODUCT CODE: 1821 1 1 0 E

====== SECTION I - MANUFACTURER INDENTIFICATION ======

MANUFACTURER'S NAME: T. W. GRAPHICS GROUP

ADDRESS: 7220 East Slauson Avenue, City of Commerce, CA 90400

EMERGENCY PHONE: 1-800-424-9300 INFORMATION PHONE: (323) 721-1400

DATE REVISED: 08-22-91 NAME OF PREPARER: Norma David

==== SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION =====

OCCUPATIONAL EXPOSURE LIMITS VAPOR PRESSURE WEIGHT

HAZARDOUS COMPONENTS CAS NUMBER OSHA PEL ACGIH TLV MFR TLV mm Hg @ TEMP PERCENT

Dipropylene Glycol 25265-71-8 NE NE 0.0 68F 50

+++++ No toxic chemical (s) subject to the reporting requirements of Section 313 of Title III and of 40 CFR 372 are present. +++++++

===== SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS ======

BOILING POINT: 449 Deg F **SPECIFIC GRAVITY (H20=1):** 1.0

VAPOR DENSITY: HEAVIER THAN AIR EVAPORATION RATE: SLOWER THAN ETHER

COATING V. O. C.: 8.50 LB/GL (1019 G/L)

MATERIAL V. O. C. : 4.21 LB/GL (504 G/L)

SOLUBILITY IN WATER: Very soluble.

APPEARANCE AND ODOR: Clear liquid, practically no odor. ====== SECTION IV - FIRE AND EXPLOSION HAZARD DATA ======== FLASH POINT: None METHOD USED: TCC FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 8.5% UPPER: 1.3% EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG SPECIAL FIREFIGHTING PROCECURES Wear self-contained breathing apparatus and protective clothing to protect against hazardous effects of normal combustion oxygen deficiency. UNUSUAL FIRE AND EXPLOSION HAZARDS No available information. 1820 REDUCER MATERIAL SAFETY DATA SHEET PAGE 2 OF 3 ======= SECTION V - REACTIVITY DATA ============== STABILITY: STABLE CONDITIONS TO AVOID Keep away from heat, sparks, and open flame. INCOMPATIBILITY (MATERIALS TO AVOID) Isolate from oxidizing materials. HAZARDOUS DECOMPOSITION OR BYPRODUCTS Normal combustion byproducts as carbon dioxide, carbon monoxide, aldehydes, acids. HAZARDOUS POLYMERIZATION: WILL NOT OCCUR INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

High vapor concentration (100 ppm) may cause nasal and respiratory irritations.

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Liquid may cause moderate to severe eye irritation and slight to moderate skin irritation.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Liquid may cause slight to moderate skin irritation.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

Ingestion may produce central nervous system (CNS) depression.

HEALTH HAZARDS (ACUTE AND CHRONIC)

Slight nasal and respiratory discomfort may occur on exposure to 100 ppm for 5 minutes, becoming more pronounced at 1000 ppm.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

Pre-existing eye, skin, and respiratory disorders may be aggravated by overexposure.

EMERGENCY AND FIRST AID PROCEDURES:

EYE CONTACT: Immediately flush eyes with flowing water for at least 15 minutes while holding the eyelids open. If irritation persists, seek medical attention.

SKIN CONTACT: Wash thoroughly with soap and water. If irritation persists, seek medical attention.

INHALATION: If there are acute or chronic symptoms, move person to fresh air, give artificial respiration, and call a physician.

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====== SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE =====

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Eliminate open flames in the vicinity of spill or released vapors. Stop source of leak. Absorb large spills with absorbent clay or other suitable materials.

WASTE DISPOSAL METHOD

Place contaminated material in disposable containers. Incinerate observing local, state, and federal health, safety, and pollution laws.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Store and use in a well-ventilated area.

DO NOT STORE OR USE NEAR OPEN FLAME, SPARKS OR HOT SURFACES.

OTHER PRECAUTIONS:

Practice to avoid excessive eye and skin exposure.

====== SECTION VIII - CONTROL MEASURES ==========

RESPIRATORY PROTECTION:

Consult supplier for an approved air-purifying respirator.

VENTILATION:

Good general ventilation should be sufficient for most conditions.

PROTECTIVE GLOVES:

Use impervious gloves when prolonged or frequently repeated contact occurs.

EYE PROTECTION:

Use safety goggles for prolonged exposure.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Solvent resistant aprons, eyewash fountains, safety showers are recommended.

WORK/HYGIENIC PRACTICES

Launder contaminated clothing before reuse.

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