MATERIAL SAFETY DATA SHEET

DATE OF PRINTING: 07/10/00

SECTION I

MANUFACTURER: GL YPTAL, INC.

305 EASTERN AVE CHELSEA, MA 02150

TELEPHONE: 617-884-6918 PRODUCT CLASS: ENAMEL CODE IDENTIFICATION: 8735 TRADE NAME: GLYPTAL

HMIS 230

SECTION II - HAZARDOUS INGREDIENTS

OSHA PEL PERCENT ACGIH TLV INGREDIENT BY WEIGHT PPM mg/cu.m. PPM mg/cu.m.

100

NA

100

NA

35.9 XYLENE CAS NUMBER 1330-20-7

HMIS HEALTH-I FLAMMABILITY-3 REACTIVITY-O

XYLOL 1.4

BARIUM SULFATE CAS NUMBER

HMIS HEALTH=O FLAMMABILITY=O REACTIVITY=O

BARIUM SULFATE

ZINC SULFIDE 0.6 NA NA

CAS NUMBER

HMIS HEALTH-O FLAMMABILITY-O REACTIVITY-O

ZINC SULFIDE

HYDRATED MAGNESIUM SILICATE 2.1

CAS NUMBER 14807-96-6

HMIS HEALTH-2 FLAMMABILITY-O REACTIVITY-O

TALC

TOLUENE 0.8 100 100

CAS NUMBER 108-88-3

HMIS HEALTH=2 FLAMMABILITY=3 REACTIVITY=0

TOLUENE

ELEMENTAL CARBON 3.5 < 0.1

CAS NUMBER 1333-86-4

HMIS HEALTH=O FLAMMABILITY=O REACTIVITY=O

CARBON BLACK

STODDARD SOLVENT 100 100

CAS NUMBER 8052-41-3

HMIS HEALTH-2 FLAMMABILITY-2 REACTIVITY-O

HYDROCARBON MIXTURE

TRIETHYLAMINE CAS NUMBER 121-44-8

< 0.1HMIS HEALTH-2 FLAMMABILITY-4 REACTIVITY-0

TRIETHYLAMINE

MANGANESE COMPOUND < 0 . 1

CAS NUMBER 7439-96-5

HMIS HEALTH=2 FLAMMABILITY=2 REACTIVITY=0

MANGANESE COMPOUND

VM&P NAPTHA 7.0 300 300

CAS NUMBER 8030-30-6

HMIS HEALTH-2 FLAMMABILITY=3 REACTIVITY=0

ALIPHATIC HYDROCARBON

VM & P (CAS# 8030-30-6). AGENCY OSHA.TYPE STEL. EXPOSURE LIMIT 400 PPM

N/A MEANS NOT AVAILABLE N/EST MEANS NOTESTABLISHED

NOT EST. means NOT ESTABLISHED NOT EST. means NOT ESTABLISHED

N/A MEANS NOT AVAILABLE NOT EST MEANS NOT ESTABLISHED

SECTION III - PHYSICAL DATA

BOILING RANGE: 232.0 TO 345.0 F VAPOR DENSITY: HEAVIER THAN AIR

EVAPORATION RATE: SLOWER THAN ETHER

PERCENT VOLATILE BY VOLUME: 61.0 VOC (less water): 4.29 LBS/GAL

WEIGHT PER GALLON: 9.40 POUNDS

1

V.O.C.Is determined per EPA Reference method 24 using ASTM procedures D2369

.D1475 and D 3960.

VAPOR PRESSURE: NA MELTING POINT: NA

SOLUBILITY IN WATER: NEGLIGIBLE

APPEARANCE AND ODOR: LT. GRAY ENAMEL

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

OSHA CATEGORY: FLAMMABLE LIQUID FLASH POINT: 74 F TCC LEL: 1.0 UEL: NA

EXTINGUISHING MEDIA:

Carbon dioxide, dry chemical or foam

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Pressure may build up in closed containers that are exposed to heat. Solvent vapors are heavier than air and may travel a considerable distance along the ground to an ignition source and "flash back".

SPECIAL FIRE FIGHTING PROCEDURES:

Water may be ineffective, however, water may be used to cool closed containers that are exposed to heat. Firefighting personnel should wear self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: SEE SECTION II

PRIMARY ROUTE (S) OF ENTRY:

Inhalation and skin contact

EFFECTS OF OVEREXPOSURE:

Headache, nausea, dizziness, confusion, irritability.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Respiratory difficulties or preexisting skin sensitization.

CARCINOGENICITY:

None of the components of this product are reported carcinogens in A/C with OSHA, NTP, IARC and NIOSH.

EMERGENCY FIRST AID PROCEDURES:

INHALATION: Remove to fresh air. Administer artificial respiration

or oxygen if breathing is difficult.

SKIN: Wash affected area with soap and water. Remove and launder contaminated clothing. Consult a physician if irritation persists.

EYES: Flush immediately with large amounts of water for at least 15 minutes. Take to a physician for medical treatment,

INGESTION: Call a physician immediately.

Pre-Exiting liver and/or kidney disorders may be aggrevated by exposure to xylene. Reports have associated repeated and prolonged

occupational overexposure to xylene with permanent brain and nervous system damage.

While this material has a low degree of toxicity, breathing high concentrations of vapors or mists may cause irritation of the nose and throat respiratory symptoms associated with pre-existing lung disorders may be aggravated by exposure to this material persons with pre-existing heart disorders may be more susceptible to irregular heartbeats if exposed to high concentrations of this material. Reports have associated repeated and prolonged occupational over-exposure to solvents with permanent brain and nervous system damage.

SECTION VI - REACTIVITY DATA

STABILITY: NORMALLY STABLE

CONDITIONS TO AVOID:

None known

INCOMPATIBILITY (Materials to avoid)

Strong acids and bases

HAZARDOUS DECOMPOSITION PRODUCTS:

BY FIRE: Normal products of incomplete combustion.

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS TO AVOID:

None known

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Provide adequate ventilation. Remove all possible ignition sources. Absorb and dispose using non-sparking tools.

Eliminate all sources of ignition. Evacuate unprotected personnel, Water

spray may be used. To contain run-off, cover with an absorbent material

and place in containers for proper disposal. Flush area with water to remove residue.

WASTE DISPOSAL METHOD:

Dispose in accordance with local applicable regulations.

Dispose of using an approved incineration process or in accordance with local, state, and federal regulations regarding health and pollution.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

In outdoor or open areas use Bureau of Mines approved mechanical

filter respirator to remove solid airborne particulates of overspray. Indoors, where ventilation is inadequate, use Bureau of Mines approved chemical-mechanical respirators designed to remove both particulate and vapor.

VENTILATION:

PROTECTIVE GLOVES:

Recommended if skin contact is likely.

EYE PROTECTION:

Chemical splash goggles recommended if potential for splash or eye contact is likely.

OTHER PROTECTIVE EQUIPMENT:

Recommended as needed to avoid contact.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING OR STORING:

Store in a cool dry place away from heat, sparks and open flame. Keep containers closed and upright to prevent leakage. Outside or detached

storage is preferred. Inside storage should be in a standard

flammable liquid storeroom or cabinet. Metal containers should be

grounded when transferring material from one container to another. Do

not reuse product container for any purpose.

OTHER PRECAUTIONS:

PREPARED BY: TECHNICAL STAFF

REFERENCE DATE: 1/30/00

THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA

BELIEVED TO BE CORRECT. HOWEVER, NO GUARANTEE OR WARRANTY OF ANY KIND,

EXPRESSED OR IMPLIED, IS MADE WITH RESPECT TO THE INFORMATION ABOVE.

TO WHOM IT MAY CONCERN: EFFECTIVE JAN 1, 1989, WE ARE REQUIRED BY SARA TIT LE III SECTION 313 OF THE RIGHT TO KNOW LEGISLATION, TO INFORM YOU OF THE PERCENTAGE OF ANY INGREDIENT IN A PRODUCT WHICH IS IN THE 313 LIST OR AS

AN LISTING AS A COMPONENT OF A MATERIAL WHICH IS IN A CATEGORY OF CHEMICAL

LIST.

PRODUCT: 8735 GLYPTAL

1.4% BARIUM COMPOUND (CAS# 7440-39-3)

35.9% XYLENE (CAS NUMBER 1330-20-7)

IF YOU WILL MULTIPLY YOUR TOTAL PURCHASES FROM US AS WELL AS FROM OTHER SUPPLIERS BY THE PERCENTAGE OF EACH INGREDIENT FOUND IN EACH PRODUCT AND IF THE TOTAL QUANTITY EXCEEDS THE REPORTABLE QUANTITY FOR THAT INGREDIENT YOU ARE REQUIRED TO FILE FORM R REPORTS.