

MATERIAL SAFETY DATA SHEET

DATE OF PRINTING: 11/19/96

SECTION I

MANUFACTURER: GLYPTAL, INC.
 305 EASTERN AVE
 CHELSEA, MA 02150
 TELEPHONE: 617-884-6918
 PRODUCT CLASS: ENAMEL
 CODE IDENTIFICATION: 8012
 TRADE NAME: GLYPTAL

GLYPTAL HAS FORMULATED SUBSTITUTE PRODUCTS WHICH HAVE SIMILAR HANDLING AND TECHNICAL PERFORMANCE CHARACTERISTICS AND ARE COMPLIANT WITH ALL EXISTING FEDERAL ENVIRONMENTAL LAWS. FOR MORE INFORMATION CALL 1-800-457-1201

HMIS 2 3 0

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT BY WEIGHT	ACGIH TLV PPM	OSHA PEL mg/cu.m. PPM
XYLENE CAS NUMBER 1330-20-7 HMIS HEALTH=1 FLAMMABILITY=3 REACTIVITY=0	23.4	100	100
XYLOL			
STODDARD SOLVENT CAS NUMBER 8052-41-3 HMIS HEALTH=2 FLAMMABILITY=2 REACTIVITY=0	7.0	100	100
HYDROCARBON MIXTURE			
BUTYL CELLOSOLVE CAS NUMBER 111-76-2 HMIS HEALTH=2 FLAMMABILITY=1 REACTIVITY=0	4.5	25	25
ETHYLENE GLYCOL N-BUTYL ETHER			
DIPENTENE CAS NUMBER HMIS HEALTH=2 FLAMMABILITY=2 REACTIVITY=0	0.3	200	
TERPENE HYDROCARBON SOLVENT			
BARAYTES CAS NUMBER HMIS HEALTH= FLAMMABILITY= REACTIVITY=	10.8		
BARIUM COMPOUND			
HYDRATED MAGNESIUM SILICATE CAS NUMBER 14807-96-6 HMIS HEALTH=2 FLAMMABILITY=0 REACTIVITY=0	1.1	20	
TALC			
VM&P NAPHTHA CAS NUMBER 8030-30-6 HMIS HEALTH=2 FLAMMABILITY=3 REACTIVITY=0	3.5	300	300
ALIPHATIC HYDROCARBON			
TRIETHYLAMINE CAS NUMBER 121-44-8 HMIS HEALTH=2 FLAMMABILITY=4 REACTIVITY=0	0.3	25	
TRIETHYLAMINE			
N-BUTANOL CAS NUMBER 71-36-3 HMIS HEALTH=1 FLAMMABILITY=3 REACTIVITY=0	0.3	50	50
OXYGENATED HYDORCARBON			

VM & P (CAS# 8030-30-6). AGENCY OSHA TYPE STEL. EXPOSURE LIMIT 400 PPM
N/A MEANS NOT AVAILABLE N/EST MEANS NOT ESTABLISHED
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: 244.0 TO 345.0 F VAPOR DENSITY: HEAVIER THAN AIR
EVAPORATION RATE: SLOWER THAN ETHER
PERCENT VOLATILE BY VOLUME: 54.4 VOC (less water): 3.81 LBS/GAL
WEIGHT PER GALLON: 9.74 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: GRAY ENAMEL

=====

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

OSHA CATEGORY: FLAMMABLE LIQUID

FLASH POINT : 80 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-Existing liver and/or kidney disorders may be aggravated by exposure to xylene. Reports have associated repeated and prolonged occupational overexposure to xylene with permanent brain and nervous system damage. Prolonged or repeated exposure to vapors or mists of glycol ethers may cause blood disorders. Liver damage, kidney damage. Respiratory symptoms associated with pre-existing lung disorders (E.G. ASTHMA-LIKE CONDITIONS) may be aggravated by overexposure to glycol ethers.

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: 1/30/94

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 TITLE 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: 8012 GLYPTAL

1.9% TITANIUM DIOXIDE (CAS # 13463-67-7)
23.4% 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.