



Safety Data Sheet

Seal Bond MA-274

Revision Date: November 19, 2015

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MA-274
PRODUCT CODES: MA-274

MANUFACTURER: Seal Bond
STREET ADDRESS: 14851 Michael Lane
CITY, STATE, ZIP: Spring Lake, MI 49456

INFORMATION PHONE: 616-850-0507
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PREPARED BY: Kelly Barnes

Chemical Name or Class: solvent/rubber mixture

SECTION 2. HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Flammable liquid category 3, Specific target organ toxicity following repeated exposure category 2, Acute dermal toxicity category 4, Skin corrosion/irritation category 2, Serious eye irritation category 2A, Acute toxicity inhalation category 4, Carcinogenicity category 2, Germ cell mutagenicity category 1B, Specific target organ toxicity – single exposure category 3, Chronic hazard to aquatic environment category 3

GHS Label Elements and Precautionary Statements:



Label Elements:

Hazard Statements:

Warning: Flammable liquid and vapor.

Warning: May cause damage to organs (liver, kidney, nervous system, respiratory system and lungs) through inhalation

Warning: May cause damage to organs (liver, kidney, nervous system, respiratory system and lungs) through prolonged or repeated exposure

Warning: Harmful in contact with skin

Warning: Causes skin irritation

Warning: Causes serious eye irritation

Warning: Harmful if inhaled

Warning: Suspected of causing cancer

Danger: May cause genetic defects

Warning: May cause respiratory irritation.

Harmful to aquatic life with long lasting effects

Precautionary statements:

P102 Keep out of reach of children.

P103 Read label before use.

P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P260 Do not breathe dust/fume/gas/mist/vapours/spray

P264 Wash hands thoroughly after handling.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray

P271 Use only outdoors or in a well-ventilated area

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P273 Avoid release to the environment.

Response

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.

P370 + P378 In case of fire: Use FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL for extinction.

P314 Get medical advice/attention if you feel unwell

P302 + P352 IF ON SKIN: wash with plenty of soap and water

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention.

P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

P337 + P313 IF eye irritation persists: Get medical advice/attention

P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up

P233 Keep container tightly closed.

Disposal:

P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws

HMIS HAZARD CLASSIFICATION

HEALTH: 3 FLAMMIBILITY: 3 REACTIVITY: 0 PERSONAL PROTECTIVE EQUIPMENT: G

POTENTIAL HEALTH EFFECTS

EYES:

CAN CAUSE SEVERE IRRITATION, REDNESS, TEARING OR BLURRED VISION.

SKIN:

MAY CAUSE IRRITATION, DEFATTING AND DERMATITIS.

INGESTION:

CAN CAUSE GASTROINTESTINAL IRRITATION, NAUSEA, VOMITING, DIARRHEA AND ASPIRATION OF MATERIAL INTO THE LUNGS CAN CAUSE CHEMICAL PNEUMONITIS WHICH CAN BE FATAL.

INHALATION:

CAN CAUSE NAUSEA AND RESPIRATORY IRRITATION, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, HEADACHE, AND POSSIBLE UNCONSCIOUSNESS.

HEALTH HAZARDS (ACUTE AND CHRONIC):

REPEATED CONTACT TO SKIN MAY CAUSE DEFFATTING OR DRYNESS OF SKIN OR OTHER SIMILAR CONDITIONS. OVER-EXPOSURE TO THIS MATERIAL CAN CAUSE CARDIAC ABNORMALITITES, ANEMIA, LIVER ABNORMALITITES, KIDNEY DAMAGE OR EVEN EYE DAMAGE.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OF OTHER ALLERGIC RESPONSE.

CARCINOGENICITY

OSHA: NO NTP: NO IARC: yes

NPT PROGRAM- NO IARC PROGRAM- NO

ADDITIONAL CARCINOGENICITY INFORMATION:

Some colors may contain carbon black - Explanation Of Carcinogenicity: IARC MONOGRAPHS ON EVALUATION OF CARCINOGENIC RISK OF CHEMICALS TO MAN, VOL 65, PG 149, 1996: GROUP 2B. Product may contain ethyl benzene as a component of xylene (IARC 2B). Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (group 2B).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>INGREDIENT</u>	<u>CAS NO.</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>OSHA STEL</u>	<u>WEIGHT %</u>
*XYLENE	1330-20-7	100 PPM	100 PPM	150 PPM	5%
*ethyl benzene (as a component of xylene)	100-41-4	100ppm	100ppm	125ppm	<0.5%
*toluene (as a component of xylene)	108-88-3	200ppm	20ppm	150ppm	0-0.1
AROMATIC PETROLEUM DISTILLATES	64742-95-6	100PPM	100PPM	NONE	10-30
*cumene (as a component of 64742-95-6)	98-82-8	50ppm	50ppm	NONE	(<1%)
*1,2,4-Trimethylbenzene (as a component of	64742-95-6)				
	95-63-6	25ppm	NONE	NONE	(<15%)
*ethyl benzene (as a component of 64742-95-6)	100-41-4	100ppm	100ppm	125ppm	(<0.3%)
*Xylene (as a component of CAS# 64742-95-6)	1330-20-7	100PPM	100PPM	150PPM	(<1%)
ZINC DIBUTYLDITHIOCARBAMATE	136-23-2	NONE	NONE	NONE	1-5
ALICYCLIC HYDROCARBON RESIN	69430-35-9	NONE	NONE	NONE	7-13
STYRENE/ETHYLENE/BUTYLENE BLOCK					
COPOLYMER	66070-58-4	NONE	NONE	NONE	7-13
LIMESTONE	1317-65-3	15mg/m3	5MG/M3	NONE	10-30
Light stabilizer	Trade Secret	none	none	none	0.1-1
Benzotriazole Derivative, Branched Ester	Trade Secret	none	none	none	0.1-1
ZINC OXIDE	1314-13-2	30mppcp	30mppcp	30mppcp	1-5
EPDM Rubber Granules (cured)	non-hazardous	NONE	NONE	NONE	10-30
Colors may Contain @ 10-30%:					
Titanium Dioxide	13463-67-7	10mg/m3	10mg/m3	5mg/m3	
*Carbon black	1333-86-4	3.5 ppm	3.5 ppm	none	<1.0%
Acrylic polymers (non-hazardous)	trade secret	NONE	NONE	NONE	
C.I. Pigment violet 19	1047-16-1	NONE	NONE	NONE	
Barium Sulfate	7727-43-7	5 mg/m3	10 mg/m3	NONE	
zinc salt of alkyl naphalene sulfonic acid					
	undisclosed	NONE	NONE	NONE	
solvent naptha	64742-88-7	NONE	NONE	NONE	
polyamine polyester polymer	(non hazardous)	NONE	NONE	NONE	
C.I. Pigment blue 15	147-14-8	NONE	NONE	NONE	
C.I. Pigment Blue	25869-00-5	NONE	NONE	NONE	
C11-C13 isoparaffin	64741-65-7	NONE	NONE	NONE	
C.I. Pigment green 17	1308-38-9	NONE	NONE	NONE	
Alkyl polyether phosphat ester	trade secret	NONE	NONE	NONE	
C.I. Pigment green 7	1328-53-6	NONE	NONE	NONE	
C.I. Pigment green 36	14302-13-7	NONE	NONE	NONE	
C.I. Pigment Yellow	4531-49-1	NONE	NONE	NONE	
C.I. Pigment Yellow	5567-15-7	NONE	NONE	NONE	
C.I. Pigment yellow 42	51274-00-1	NONE	NONE	NONE	
pigment orange	15793-73-4	NONE	NONE	NONE	
C.I. Pigment red 101	1309-37-1	NONE	NONE	NONE	
C.I. Pigment red 3	2425-85-6	NONE	NONE	NONE	
aluminum silicate dehydrate	1332-58-7	NONE	NONE	NONE	
mineral spirits	8052-41-3	100ppm	100ppm	NONE	
C.I. Pigment red 187	59487-23-9	NONE	NONE	NONE	
Yellow Pigment	Not available	NONE	NONE	NONE	
Zinc Sulfate (component of yellow pigment)					
	1314-98-3	NONE	NONE	NONE	
Barium Sulfate (component of yellow pigment)					
	7727-43-7	NONE	NONE	NONE	
Titanium Dioxide (component of yellow pigment)					
	13463-67-7	NONE	NONE	NONE	

Pigment yellow 65 (component of yellow pigment)

6528-34-3

NONE

NONE

NONE

SECTION 3 NOTES: *Indicates toxic chemical(s) subject to reporting requirements of section 313 of Title III and of 40 CFR 372.

Note: Ingredients listed without percentages, the percentages are considered a trade secret.

SECTION 4. FIRST AID MEASURES

EYES:

FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN.

SKIN:

SKIN CONTACT WILL NORMALLY CAUSE NO MORE THAN IRRITATION BUT WASH AFFECTED AREA WITH SOAP AND WATER AND REMOVE CONTAMINATED CLOTHING PROMPTLY.

INGESTION:

DO NOT INDUCE VOMITING, KEEP PERSON WARM AND CONSULT A PHYSICIAN IMMEDIATELY.

INHALATION:

REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY.

SECTION 5. FIRE-FIGHTING MEASURES

FLAMMABLE LIMITS IN AIR,

UPPER: not available

(% by volume)

LOWER: not available

FLASH POINT: 98+F

METHOD USED:

SETA FLASH

EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO₂, DRY CHEMICAL

SPECIAL FIRE FIGHTING PROCEDURES:

DO NOT ENTER CONFINED FIRE AREA WITHOUT FULL BUNKER GEAR INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL ALL FIRE EXPOSED CONTAINERS WITH WATER. PRESENCE OF SOLVENTS IN PRODUCT MAY REQUIRE GROUNDING.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

IF FIRE OCCURS, SOLVENTS MAY PRODUCE EXCESSIVE PRESSURE. SEALED DRUMS MAY RUPTURE AND IGNITE. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL ALONG THE GROUND AND IGNITE BY ANY SOURCE OF IGNITION. NEVER USE A CUTTING OR WELDING TORCH NEAR CONTAINERS (EVEN EMPTY).

SECTION 6. RELEASE MEASURES

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

WEAR RESPIRATOR AND PROTECTIVE CLOTHING. REMOVE ALL SOURCES OF IGNITIONS. REMOVE EXCESS WITH VACUUM TRUCK AND TAKE UP THE REMAINDER WITH AN ABSORBANT SUCH AS CLAY AND PLACE IN DISPOSAL CONTAINERS. FLUSH AREA WITH WATER TO REMOVE RESIDUE.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

STORE IN A COOL DRY PLACE. SEAL ALL PARTIALLY USED CONTAINERS. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. PROPERLY LABEL ALL CONTAINERS. KEEP MATERIAL AWAY FROM ALL SOURCES OF IGNITION.

OTHER PRECAUTIONS:

AVOID ALL SKIN CONTACT. AVOID BREATHING VAPORS GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. WASH ALL CONTAMINATED CLOTHING PRIOR TO THE REUSE THEREOF. WEAR APPROPRIATE SAFETY EQUIPMENT AND RESPIRATOR AT ALL TIMES WHEN VENTILATION IS NOT SUFFICIENT TO CONTROL VAPORS.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER EXPOSURE TO VAPOR IN ACCORDANCE WITH 29 CFR 1910.134. ENGINEERING OR ADMINISTRATIVE MEASURES SHOULD BE TAKEN TO REDUCE THE RISK AND EXPOSURE.

VENTILATION:

PROVIDE SUFFICIENT MECHANICAL (GENERAL AND LOCAL EXHAUST) VENTILATION TO MAINTAIN EXPOSURE BELOW TOXIC LEVEL VALUES.

PROTECTIVE GLOVES:

IMPERVIOUS GLOVES – NEOPRENE OR RUBBER

EYE PROTECTION:

SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

WEAR BODY COVERING CLOTHING AND OTHER COVERINGS AS NECESSARY SUCH AS APRON AND APPROPRIATE FOOTWEAR TO AVOID CONTACT WITH MATERIAL.

WORK HYGIENIC PRACTICES:

OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCUPATIONAL EXPOSURE LIMIT VALUES.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: WHITE OR COLORED MEDIUM VISCOSITY LIQUID

BOILING POINT OR RANGE: 279F

VAPOR DENSITY (AIR = 1): Not available

SPECIFIC GRAVITY (H₂O = 1): 1.1

EVAPORATION RATE: not available

SOLUBILITY IN WATER: NEGLIGIBLE

Odor Threshold: N/A

pH: N/A

Melting point/freezing point: N/A

Vapor Pressure: N/A

Auto Ignition Temperature: N/A

Partition Coefficient: n-octanol/water: N/A

SECTION 10. STABILITY AND REACTIVITY

STABILITY:

STABLE

CONDITIONS TO AVOID (STABILITY):

AVOID EXCESSIVE HEAT OR OPEN FLAMES AS WELL AS ALL SOURCES OF IGNITION SUCH AS SPARKS, HEATERS, AND STATIC DISCHARGES ETC.

INCOMPATIBILITY (MATERIAL TO AVOID):

AVOID CONTACT WITH STRONG OXIDIZING AGENTS.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:

MAY FORM TOXIC CHEMICALS, CARBON DIOXIDE, CARBON MONOXIDE AND VARIOUS HYDROCARBONS ETC.

HAZARDOUS POLYMERIZATION:

WILL NOT OCCUR.

SECTION 11. TOXICOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component ALICYCLIC HYDROCARBON RESIN CAS# 69430-35-9: Oral LD-50: (Rat): > 5,000 mg/kg (highest dose tested). Dermal LD-50: (Rat): > 2,000 mg/kg (highest dose tested). Skin Irritation: (Guinea Pig, 24 h): none. Eye Irritation: unwashed eyes (Rabbit): Slight, washed eyes (Rabbit): Slight. Respiratory or skin sensitization: (Guinea Pig) - Not a skin sensitizer.

Component Xylene: Inhalation LC50 26800ppm, Skin LD50 2000 mg/kg, Ingestion LD50 4.3 g/kg. Exposure may effect skin, eye, liver, kidney, nervous system, respiratory system and lungs. High concentrations may lead to nervous system effects. Repeated overexposure has produced toxic effects in developing and young laboratory animals. Aspiration into lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal. Xylene may contain ethyl benzene, and toluene. Ethyl benzene has shown limited evidence of a carcinogenic effect.

COMPONENT Ethyl Benzene: Acute Oral toxicity LD50: ca. 3500 mg/kg (rat); Acute inhalation LC50: 17.2 mg/l 4h (rat); Acute Dermal Toxicity: 17,800 mg/kg (rabbit); Skin Irritation rabbit Draize exposure time 24h – slightly irritating. Eye Irritation rabbit Draize – severely irritating. Sensitization dermal (human patch test) non-sensitizer. Repeated Dose toxicity 28 days inhalation NOAEL: 3.4 mg/l (rabbit). Mutagenicity Genetic Toxicity in Vitro: Ames: Negative (salmonella typhimurium, metabolic activation with/without). Carcinogenicity:

Ethyl benzene was tested by inhalation exposure in mice and rats. In mice, there was an increased incidence of lung adenomas in males and liver adenomas in females. In male rats, there was an increased incidence of renal tubule adenomas and carcinomas. Two Studies of workers potentially exposed to ethyl benzene in a production plant and a styrene polymerization plant, showed no excess cancer incidence and no excess cancer mortality during a 15 year follow-up. Toxicity to Reproduction/Fertility: Inhalation (monkey, male) Reproductive effects have been observed in animal studies, In a generation study, inhalation (rat/female) NOAEL (parental): 100ppm NOAEL (F2): 100ppm. Developmental Toxicity/Teratogenicity rat, female, inhalation, gestation, daily, NOAEL (teratogenicity): 100ppm (maternal): 100ppm. Teratogenic effects seen only with maternal toxicity., Fetotoxicity seen only with maternal toxicity. Rabbit, female, inhalation, gestation, daily, NOAEL (teratogenicity) < 1000 mg/m³, NOAEL (maternal) < 1000 mg/m³.

Component CAS# 64742-95-6 Test on similar materials show a low order of acute oral and dermal toxicity. May cause eye irritation, may cause irritation on skin and mucous membranes.

Component Cumene(a minor component of CAS# 64742-95-6): IARC has classified Cumene as possibly Carcinogenic to humans (group 2B).

Component CAS# 95-63-6: Oral LD50 (rat) = 5000 mg/kg. Inhalation LC50 (rat) -4h = 18000 mg/m³.

Component ZINC DIBUTYL DITHIOCARBAMATE CAS# 136-23-2: LD50 Dermal Rabbit >2000 mg/kg. LD50 Oral Rat >5000 mg/kg Chronic toxicity Conclusion/Summary In a 92-day study, 50 mg/kg per day produced no effect in rats. In a 17-week study, the no-untoward effect level was 500 ppm in the diet of rats, providing an intake of between 41 and 47 mg/kg/day. Component is Non-mutagenic for mammals.

STYRENE/ETHYLENE/BUTYLENE BLOCK COPOLYMER CAS# 66070-58-4: Acute Toxicity Oral: Expected to be of low toxicity, LD50 > 2000 mg/kg. Acute Toxicity Dermal: Expected to be of low toxicity, LD50 > 2000 mg/kg. Skin Irritation:

Not expected to be irritating. Eye Irritation: Not expected to be irritating. Skin Sensitization: Not expected to be a skin sensitizer.

Repeated Dose Toxicity: Repeated exposure does not cause significant toxic effects. Mutagenicity: Not considered to be a mutagenic hazard

Component Limestone: LD50 Oral (rat) = 6450 mg/kg. This product contains greater than 0.1% crystalline silica which is listed as a group I carcinogen by IARC, a known carcinogen by NTP, OSHA and as A2 suspected human carcinogen by ACGIH

Component(s) Light stabilizer CAS# Trade Secret and Benzotriazole Derivative, Branched Ester CAS# Trade Secret: Acute oral toxicity:LD50 / oral / rat: > 2,000 mg/kg (Based on components). Skin irritation: Not expected to be a skin irritant. (based on known component information). Eye irritation: Not expected to be an eye irritant. (Based on components). Skin irritation: Not expected to be a skin irritant. (based on known component information). Eye irritation:

Not expected to be an eye irritant. (Based on components). Skin Sensitization: Not expected to cause sensitization. (based on known component information). Subchronic Toxicity: Information on: Benzotriazole Derivative, Branched Ester

In a 14-day study, rats were administered the active ingredient at 0, 10, 100, or 1,000 mg/kg by gavage. The 100 and 1,000 mg/kg dose levels were found to cause elevated serum liver enzyme levels and enlarged livers. The no observable effect level (NOEL) was 10 mg/kg. In a 28-day study, rats were administered the active ingredient at 0, 2, 50, and 500 mg/kg by gavage. No treatment-related clinical or neurological signs of toxicity or mortalities were recorded. Treatment-related effects, including mild anemia and toxic effects in the liver, were seen. Slight activity of the thyroid gland was also recorded and considered a secondary response to the effects in the liver. The no observable effect level (NOEL) was 2 mg/kg. Information on: Decanedioic acid, bis(2,2,6,6-tetramethyl-4-piperidinyl)ester, reaction products with tert-Bu hydroperoxide and octane In a 28-day study, rats were administered daily oral doses of 10, 100 or 1000 mg/kg/day. Males only in the 1000 mg/kg dose group exhibited a reversible, minor effect on prothrombin time, as well as effects on The formation and development of blood cells in the liver that were not totally reversed by the two-week recovery period. The no observable effect level (NOEL) was determined as 100 mg/kg in the males and 1000 mg/kg in the females. piperidinyl)ester, reaction products with tert-Bu hydroperoxide and octane Information on: Decanedioic acid, bis(2,2,6,6-tetramethyl-4- piperidinyl)ester, reaction products with tert-Bu hydroperoxide and octane. Genetic toxicity: Non-mutagenic (based on composition).

Component Titanium Dioxide: Inhalation 4 h LC50 > 6.82 mg/l; Oral LD50 > 5000 mg/kg, rat; In February 2006, IARC listed titanium dioxide as possibly carcinogenic to humans Group 2B.

Component ZINC OXIDE CAS# 1314-13-2: ORAL (LD50): Acute: 7950 mg/kg [Mouse]. Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. Mutagenic for bacteria and/or yeast.

Other Toxic Effects on Humans: Hazardous in case of inhalation. Slightly hazardous in case of skin contact (irritant), of ingestion. Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects based on animal data. No human data found at this time. May affect genetic material (mutagenic). Acute Potential Health Effects: May cause mild skin irritation. Eyes: May cause mechanical eye irritation and conjunctivitis. Inhalation: May cause mechanical irritation of the respiratory tract. A few sources claim that finely divided zinc oxide dust can cause "metal fume fever." Zinc oxide dust is generally considered a nuisance dust; adverse effects are unlikely when exposures are kept under reasonable control. Inhalation of high concentrations of Zinc Oxide fume or dust may cause "Metal Fume Fever." Symptoms of metal fume fever may include a flu-like condition involving headache, chills, fever, sweats, nausea, vomiting, cough, muscle aches and pains, and difficulty breathing, pulmonary edema. May also affect the liver. Ingestion: May cause digestive tract irritation although Zinc oxide has a low toxicity by oral exposure route. Chronic Potential Health Effects: Ingestion: Prolonged or repeated ingestion of zinc oxide may affect blood, metabolism, and the thyroid.

Component Carbon: IARC lists carbon as a possible human carcinogen Category 2B. LD50 – Intravenous, mouse = 440 mg/kg

Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.. Acute oral value of 20 gm/kg or greater in rats

SECTION 12. ECOLOGICAL INFORMATION

No data for the product itself.

Component data:

Component Xylene: Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l, Aquatic Invertebrates: Toxic 1 < LC/EC/IC50 <10mg/l, Algae: Toxic 1 < LC/EC/IC50 <10 mg/l. Mobility – floats on water. If it enters the soil it will be highly mobile and may contaminate groundwater. Oxidizes rapidly by photo-chemical reactions in air.

COMPONENT Ethyl Benzene: Biodegradation, Aerobic, 50%, Exposure time 28 days. Biochemical Oxygen demand (BOD) 5 days, 2.8% and 35 days, 1780 mg/g. Bioaccumulation: Cyprinus carpio (Carp), 15 BCF. Acute and Prolonged Toxicity to Fish LC50: 12.1 mg/l (fathead minnow, 96 h). Acute Toxicity to Aquatic Invertebrates EC50: 1.8-2.9 mg/l (water flea, 48 h). Toxicity to Aquatic Plants EC50: 4.6 mg/l (green algae, 72 h). Toxicity to microorganisms EC50: 130 mg/l (activated sludge microorganisms, 48 hr).

Component Cumene (a minor component of CAS# 64742-95-6): LC50 (fish) 1-10 mg/l.

Component CAS# 95-63-6: Toxicity to fish LC50 (fathead minnow) 7.72 mg/l 96 hr. Toxicity to daphnia and other aquatic invertebrates: Immobilization EC50 (water flea) 3.6mg/l 48hr.

Component ZINC DIBUTYLDITHIOCARBAMATE CAS# 136-23-2: Environmental effects This product shows a low bioaccumulation potential. EC50 0.74 mg/l Daphnia 48 hours, LC50 880 mg/l Fish – Bluegill Sunfish 96 hours, LC50 520 mg/l Fish - Trout 96 hours

STYRENE/ETHYLENE/BUTYLENE BLOCK COPOLYMER CAS# 66070-58-4: Basis for assessment: Ecotoxicological data have not been determined specifically for this product. The information given below is based on a knowledge of the components and the ecotoxicology of similar products. Mobility: Floats on water. Remains on surface of soil. Persistence/Degradability: Expected to be not inherently biodegradable. Persists under anaerobic conditions. Bioaccumulation: Not expected to bioaccumulate. Acute Toxicity - Fish: Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l. Acute Toxicity - Invertebrates: Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l. Acute Toxicity - Algae: Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l. Acute Toxicity - Bacteria: Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l. Sewage Treatment: Expected to be practically non toxic, LC/EC/IC 50 > 1000 mg/l

Component Limestone: inert material

Component Titanium Dioxide: Pimephales promelas (fathead minnow) < 1000 mg/l @ 96h LC50; Pseudokirchneriella subcapitata (green algae) 61 mg/l @ 72h EC50; Daphnia magna (water flea) > 1000 mg/l @ 48h EC50

Component ZINC OXIDE CAS# 1314-13-2: Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.

SECTION 13. WASTE DISPOSAL

WASTE DISPOSAL METHOD:

DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACORDANCE WITH LOCAL, STATE, AND FEDERAL LAW.

SECTION 14. Transport Information

DOT: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS XYLENE, AROMATIC PETROLEUM DISTILLATES), 3, PG III

IMO/IMDG: UN1993, FLAMMABLE LIQUID N.O.S. (CONTAINS XYLENE, AROMATIC PETROLEUM DISTILLATES), 3, PG III

SECTION 15. REGULATORY INFORMATION

No data for the product itself.

Component data:

Component ALICYCLIC HYDROCARBON RESIN CAS# 69430-35-9: WHMIS (Canada) Status: noncontrolled. US EPCRA (SARA Title III) Section 313 - Toxic Chemical List NONE. OSHA: nonhazardous

TSCA (US Toxic Substances Control Act): All components of this product are listed on the TSCA inventory. Any impurities present in this product are exempt from listing. DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): All components of this product are listed on the DSL. Any impurities present in this product are exempt from listing. AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All components of this product are listed on AICS or otherwise comply with NICNAS. MITI (Japanese Handbook of Existing and New Chemical Substances): All components of this product are listed in the Handbook or have been approved in Japan by new substance notification. ECL (Korean Toxic Substances Control Act): All components of this product are listed on the Korean inventory or otherwise comply with the Korean Toxic Substances Control Act. Philippines Inventory (PICCS) : All components of this product are listed on the Philippine inventory or otherwise

comply with PICCS. Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

Component Xylene: Xylene contains EPCRA section 313 chemicals subject to the reporting requirements of the emergency planning and community right to know act of 1968. (Maximum wt % for components of xylene are: M-Xylene CAS# 108-38-3 is 46%, P-Xylene CAS# 106-42-3 is 20%, Ethyl Benzene CAS# 100-41-4 is 19%, O-Xylene CAS# 95-47-6 is 16%.. Xylene and its components are on the California Proposition 65 list for developmental toxicity, Reproductive toxicity and carcinogen list. Ingredients are on the TSCA list, DSL Canada, AICS, China, EINECS, ENCS, Korea, New Zealand, Phillipines inventory lists and on the Massachusetts, New Jersey, Pennsylvania right to know lists Ethyl Benzene a component of xylene has been designated by IARC as a possible carcinogen to humans based on increased tumor incidence in laboratory animals. risk phrases R10 Flammable R20/21 Harmful by inhalation and in contact with skin, R38 irritating to skin, S25 Avoid contact with eyes.

COMPONENT Ethyl Benzene: US EPA CERCLA Hazardous Substances (40 CFR 302): Ethyl Benzene reportable quantity 1000 lbs. US EPA Emergency Planning and Community Right to Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.5) components, Ethyl Benzene. California Prop 65: This product contains chemicals known to the State of California to be carcinogenic: Ethyl Benzene CAS# 100-41-4 @ 1-5%.

Massachusetts, New York, Pennsylvania Right to Know list includes the following components: Ethyl Benzene CAS# 100-41-4. Massachusetts, New York, Pennsylvania Special hazardous Substance includes the following components: Ethyl Benzene CAS# 100-41-4 Component CAS# 64742-95-6 This product is a hazardous chemical . This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372 Component 1,2,4-trimethylbenzene CAS# 95-63-6 at < 42% and xylene CAS# 1330-20-7 at < 3.0%, Cumene CAS# 98-82-8 at < 2%, and Ethylbenzene CAS# 100-41-4 at < 0.40%.. This component contains chemicals on the California Proposition 65 list that may cause cancer or reproductive harm. Component is on the TSCA list as well as the AICS, DSL, ECL, EINECS, ENCS, IECSC and PICCS lists

Component Cumene (a minor component of CAS# 64742-95-6): is a SARA 313 chemical. This component is a CERCLA chemical. This component is a California Proposition 65 Chemical which is known to cause cancer or other birth defects or reproductive harm. This component is on the New Jersey right to know list. Component is on the TSCA list and Canada DSL list.

Component CAS# 95-63-6: This component is subject to SARA Title III Section 313 reporting. This component is in the TSCA and Canada DSL Lists. This component is on the Massachusetts, Pennsylvania, New Jersey right to know lists.

Component ZINC DIBUTYLDITHIOCARBAMATE CAS# 136-23-2: WHMIS (Canada) Class D-2B: Material causing other toxic effects (Toxic). Canada inventory All components are listed or exempted.

United States inventory (TSCA: All components are listed or exempted.

Europe inventory : All components are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Japan inventory: All components are listed or exempted.

Korea inventory: All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Philippines inventory (PICCS): All components are listed or exempted.

STYRENE/ETHYLENE/BUTYLENE BLOCK COPOLYMER CAS# 66070-58-4: EUROPE - EC Classification: Not classified as dangerous under EC criteria. US Federal - Superfund Amendment & Reauthorization Act (SARA) Title III:- This material is not regulated under SARA Title III. US Federal - Toxic Substances Control Act (TSCA) Inventory Status: Component(s) of this material is (are) listed on the EPA TSCA Inventory of Chemical Substances. Component is on the Canada DSL list.

Component Limestone: TSCA listed. Canada Exempt, naturally occurring Substance. EINECS, ECL, ENCS, CIES, PICCS listed. This product contains trace amounts of chemicals known to the state of California to cause cancer or reproductive effects.

Component(s) Light stabilizer CAS# Trade Secret and Benzotriazole Derivative, Branched Ester CAS# Trade Secret: Canada: Domestic Substances List (DSL): All components either exempt or listed on the DSL. This material does not contain any hazardous components that are reportable according to WHMIS criteria. US: Toxic Substances Control Act (TSCA): All component(s) comprising this product are either exempt or listed on the TSCA inventory

Component Titanium Dioxide: Contains Proposition 65 Chemicals, is on the PA Hazardous substance list, is on the NJ right to know Regulated chemical List.

Titanium Dioxide is on inventory or in compliance with EINECS, TSCA, AICS, DSL, ENCS (JP), KECI (KR), PICCS (PH) and INV (CN).

Component ZINC OXIDE CAS# 1314-13-2: Federal and State Regulations: Illinois toxic substances disclosure to employee act: Zinc oxide Rhode Island RTK hazardous substances: Zinc oxide Pennsylvania RTK: Zinc oxide Minnesota: Zinc oxide Massachusetts RTK: Zinc oxide New Jersey: Zinc oxide California Director's List of Hazardous Substances: Zinc oxide TSCA 8(b) inventory: Zinc oxide Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances. WHMIS (Canada): Not controlled under WHMIS (Canada).DSL (EEC): R40- Possible risks of irreversible effects.

Component Carbon: Contains Proposition 65 Chemicals .Carbon: is listed on TSCA and DSL Canada

Component acrylic polymers: Listed on TSCA and DSL.

Component Barium Sulfate : Listed on TSCA and DSL.

Component C.I. Pigment violet 19 CAS# 1047-16-1: Listed on TSCA and DSL.

Component zinc salt of alkyl naphalene sulfonic acid: Listed on TSCA and DSL.

Component solvent naptha CAS# 64742-88-7: Listed on TSCA and DSL.

Component polyamine polyester polymer (non hazardous): Listed on TSCA and DSL.

Component C.I. Pigment blue 15 CAS# 147-14-8: Listed on TSCA and DSL.
Component C.I. Pigment blue CAS# 25869-00-5: Listed on TSCA and DSL.
Component CAS# 164741-65-7: Listed on TSCA and DSL.
Component C.I. Pigment green 17 CAS# 1308-38-9: Listed on TSCA and DSL.
Component Alkyl polyether phosphate ester-trade secret: Listed on TSCA and DSL
Component C.I. Pigment green CAS# 1328-53-6: Listed on TSCA and DSL.
Component C.I. Pigment green 36 CAS# 14302-13-7: : Listed on TSCA and DSL.
Component CAS# 4531-49-1: Listed on TSCA and DSL
Component CAS# 5567-15-7: Listed on TSCA and DSL. Listed on the Pennsylvania, New Jersey right to know lists
Component C.I. Pigment yellow 42 CAS# 51274-00-1 Listed on TSCA and DSL.
Component CAS# 15793-73-4: Listed on TSCA and DSL. Listed on the Pennsylvania, New Jersey right to know lists
Component C.I. Pigment red 101 CAS# 1309-37-1: Listed on TSCA and DSL.
Component C.I. Pigment red 3 CAS# 2425-85-6: Listed on TSCA and DSL.
Component aluminum silicate dehydrate CAS# 1332-58-7: Listed on TSCA and DSL.
Component mineral spirits CAS# 8052-41-3: Listed on TSCA and DSL.
Component C.I. Pigment red 187 CAS# 59487-23-9: Listed on TSCA and DSL.
Component Yellow Pigment: Not Hazardous as defined by OSHA HC Standard 29 CFR 1810.1200.

SECTION 16. OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available

See Section 1 for date of preparation