



SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS, the Korean ISHA (Notice 2009-68), the Japanese Industrial Standard JIS Z 7250: 2000, Mexican NOM018-STPS 2000, SPRING Singapore, REACH, CLP 1272:2208 and the Global Harmonization Standard

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY UNDERTAKING

IDENTIFICATION OF THE MIXTURE

TRADE/MATERIAL NAME:

**STI EZ-Path® Marine Fire Rated Pathway Transits (MDM)
Type 150, 300, and 400, Marine 150 Single Plate Kit with Device for Aluminum Divisions**

CHEMICAL NAMES:

Formed Steel with Intumescent Fire-Retardant Gaskets

SYNONYMS:

None

RELEVANT USE of the SUBSTANCE:

Intumescent Sealing Device

USES ADVISED AGAINST:

Other than Relevant Use

SUPPLIER/MANUFACTURER'S NAME:

STI Marine Firestop: A division of **Specified Technologies, Inc.**

Address:

210 Evans Way,
Somerville, New Jersey 08876

Business Phone:

(800) 992-1180 (8:00am to 5:00pm Eastern Standard Time)

Emergency Phone:

U.S., Canada: 1-800-255-3924 (24 hrs)

International: +1-813-248-0585 (collect-24 hrs)

EMAIL of Competent Person for Information on SDS:

techserv@stifirestop.com

ALL United States Occupational Safety and Health Administration (OSHA) Standard, 29 CFR Parts 1910, 1915, 1917, 1918 and 1926, and the U.S. OSHA Instruction CPL 02-02-079, July 9, 2015, U.S. State equivalent Standards, Canadian WHMIS [Controlled Products Regulations], European Union REACH and CLP EC 1272/2008, Mexican NOM018-STPS 2000, SPRING Singapore, and Japanese JIS Z7253 required information is included in appropriate sections based on the Global Harmonization Standard (GHS). This product has been classified in accordance with the hazard criteria of the countries listed above.

This product is defined as an "Article" under the U.S. Federal OSHA Hazard Communication Standard (29 CFR 1910.1200), EU Directives, and the Canadian Workplace Hazardous Materials Standard. Refer to Section 15 (Regulatory Information) for specific regulatory citations. As articles, this product presents negligible health and physical hazards under reasonably anticipated circumstances of use. Subsequently, a Safety Data Sheet is not required under Standards cited above. This document is prepared to provide persons using this product with additional safety information.

2. HAZARD IDENTIFICATION

GLOBAL HARMONIZATION, U.S. OSHA, JAPANESE JIS Z7253, EU REACH AND CLP REGULATION (EC) 1272/2008 AND THE TAIWAN REGULATION OF LABELING AND HAZARD COMMUNICATION OF DANGEROUS AND HARMFUL MATERIALS: This product has been classified per GHS Standards under U.S., European, Japanese and Taiwanese regulations. This product is an article and is not required to be classified under any regulations.

KOREAN ISHA (Notice 2009-68) LABELING AND CLASSIFICATION: As an article, this product is not subject to ISHA Notice 2009-68.

3. COMPOSITION and INFORMATION ON INGREDIENTS

Chemical Name	CAS #	EINECS or ELNICS #	Chinese IECSC Inventory	Japanese ENCS #	Korean ECL #	Taiwan NESCI ECS	WT%	LABEL ELEMENTS U.S. OSHA, REACH, CLP 1272, Japanese JIS Z7253 & GHS Classification Korean ISHA Classification Hazard Statement Codes
Graphite	7782-42-5	231-955-3	Listed	Excepted as Mineral	KE-18101	Listed	20-30	Classification Not Applicable
Methylene Bisphenyl Isocyanate	101-68-8	202-966-0	Listed	1-561	KE-35565	Listed	2-5	PUBLISHED CLASSIFICATION <u>U.S. OSHA, REACH, EU CLP, JAPANESE JIS Z7253, KOREAN ISHA & GHS:</u> Classification: Carcinogenic Cat. 2, Acute Inhalation Toxicity Cat. 4, Skin Irritation Cat. 2, Eye Irritation Cat. 2A, Skin Sensitization Cat. 1B, Respiratory Sensitization Cat. 1B, STOT (Inhalation-Respiratory Irritation) SE Cat. 3, STOT RE Cat. 2 Hazard Codes: H351, H332, H315, H317, H319, H334, H335, H373
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl) methane	119-47-1	204-337-6	Listed	4-100	KE-23821	Listed	1-3	SELF CLASSIFICATION <u>U.S. OSHA, REACH, EU CLP, JAPANESE JIS Z7253 & GHS:</u> Classification: Reproductive Toxicity Cat. 2, Eye Irritation Cat. 2B, Aquatic Chronic Cat. 3 Hazard Codes: H361f, H320, H413 <u>KOREAN ISHA:</u> Classification: Reproductive Toxicity Cat. 2, Eye Irritation Cat. 2A, Aquatic Chronic Cat. 3 Hazard Codes: H361f, H319, H413
Other Trace Ingredients							Balance	Classification Not Applicable
Galvanized Steel	Mixture						Proprietary	Classification Not Applicable

3. COMPOSITION and INFORMATION ON INGREDIENTS (Continued)

Chemical Name	CAS #	EINECS or ELNICS #	Chinese IECSC Inventory	Japanese ENCS #	Korean ECL #	Taiwan NESCI ECS	WT%	LABEL ELEMENTS U.S. OSHA, REACH, CLP 1272, Japanese JIS Z7253 & GHS Classification Korean ISHA Classification Hazard Statement Codes
Ingredients of Rubber Solid								
1,3-Butadiene Homopolymer, Hydroxy Terminated	69102-90-5	Not Listed	Listed	6-722, 6-757	KE-03730	Listed	25-30	Classification Not Applicable
Diundecyl Phthalate	3648-20-2	222-884-9	Listed	3-1307	KE-02299	Listed	20-30	SELF CLASSIFICATION <u>U.S. OSHA, REACH, EU CLP, JAPANESE JIS Z7253 & GHS:</u> Classification: Reproductive Toxicity Cat. 2, Eye Irritation Cat. 2B, Aquatic Acute Cat. 1, Aquatic Chronic Cat. 3 Hazard Statement Codes: H361d, H320, H410, H412 <u>KOREAN ISHA:</u> Classification: Reproductive Toxicity Cat. 2, Eye Irritation Cat. 2A, Aquatic Chronic Cat. 3 Hazard Codes: H361f, H319, H413

4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES: Contaminated individuals must be taken for medical attention if any adverse effects occur. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Take a copy of label and SDS to physician or health professional with the contaminated individual. Wash clothing and thoroughly clean shoes before reuse.

Skin Exposure: If adverse skin effects occur, discontinue use and flush contaminated area. Seek medical attention if adverse effect occurs after flushing.

Inhalation: If heated and fumes or vapors are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if adverse effect continues after removal to fresh air.

Eye Exposure: If this particles from this product contaminates the eyes, rinse eyes under gently running water. Use sufficient force to open eyelids and then "roll" eyes while flushing. Minimum flushing is for 20 minutes. The contaminated individual must seek medical attention if any adverse effect continues after rinsing.

Ingestion: Due to the form of the product, ingestion is unlikely.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: None known.

INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT IF NEEDED: Treat symptoms and eliminate exposure.

5. FIRE-FIGHTING MEASURES

FLASH POINT: Not determined.

AUTOIGNITION TEMPERATURE: Not available.

FLAMMABLE LIMITS (in air by volume, %): Not applicable.

FIRE EXTINGUISHING MEDIA: Use extinguishing materials suitable for the surrounding area.

UNSUITABLE FIRE EXTINGUISHING MEDIA: None known.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product is formulated to be non-flammable and non-combustible. When involved in a fire, this material may decompose and produce irritating vapors and toxic gases (e.g., carbon, nitrogen and metal oxides, phthalates, ammonia, formaldehyde, hydrogen cyanide, nitriles, isocyanates, nitrosamines, hydrogen chloride, and acrylic monomers).

Explosion Sensitivity to Mechanical Impact or Static Discharge: Not sensitive.

5. FIRE-FIGHTING MEASURES (Continued)

SPECIAL PROTECTIVE ACTIONS FOR FIRE-FIGHTERS: Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus (SCBA) and full protective equipment. Move containers from fire area if it can be done without risk to personnel. Water spray can be used to cool fire-exposed containers. Water fog or spray can also be used by trained firefighters to disperse this product's vapors and to protect personnel. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS AND EMERGENCY PROCEDURES: If this product is contaminated by chemical products, this situation should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. Call CHEMTREC (1-800-424-9300) for emergency assistance. Or if in Canada, call CANUTEC (613-996-6666). The atmosphere must at least 19.5 percent Oxygen before non-emergency personnel can be allowed in the area without Self-Contained Breathing Apparatus and fire protection.

PERSONAL PROTECTIVE EQUIPMENT: Proper protective equipment should be used.

Small and Large Spills: Wear sturdy gloves to protect against cuts, eye protection, and appropriate body protection. Steel-toed boots are recommended to protect against injury to feet.

METHODS FOR CLEAN-UP AND CONTAINMENT: Spills of this product present minimal hazard.

Small and Large Spills: This product can be picked-up and should be disposed of properly if the product cannot be reclaimed.

All Spills: Place all residue in appropriate containment and seal. Take other measures to protect human health and the environment as necessary. Rinse area with soap and water solution and follow with a water rinse. Decontaminate the area thoroughly. Do not mix with wastes from other materials. Dispose of in accordance with applicable Federal, State, and local procedures (see Section 13, Disposal Considerations). For spills on water, contain, minimize dispersion and collect. Dispose of recovered material and report spill per regulatory requirements.

ENVIRONMENTAL PRECAUTIONS: Run-off water may be contaminated by other materials and should be contained to prevent possible environmental damage.

REFERENCE TO OTHER SECTIONS: See information in Section 8 (Exposure Controls – Personal Protection) and Section 13 (Disposal Considerations) for additional information.

7. HANDLING and USE

PRECAUTIONS FOR SAFE HANDLING: If during the use of this product, dusts, particulates or fumes are generated, avoid breathing, or skin or eye contact. Avoid touching heated product. Wash hands thoroughly after handling this product or containers of this product.

CONDITIONS FOR SAFE STORAGE: Store this product in a cool, dry location, away from sources of intense heat. Store away from incompatible materials (see Section 10, Stability and Reactivity), water, heat and flame.

SPECIFIC END USE(S): This product is for use as a sealant. Follow all industry standards for use of this product.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely, if necessary. Collect all rinsates and dispose of according to applicable Federal, State, and local procedures.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

EXPOSURE LIMITS/CONTROL PARAMETERS:

Ventilation and Engineering Controls: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below (if applicable). Exhaust directly to the outside, taking necessary precautions for environmental protection.

Workplace Exposure Limits/Control Parameters: The following exposure limits are not expected to apply to the product, due to its solid form. Limits are given in the event of involvement in a fire or other situation in which fumes, vapors or aerosols are produced.

CHEMICAL NAME	CAS #	EXPOSURE LIMITS IN AIR							
		ACGIH-TLVs		OSHA-PELs		NIOSH-RELS		NIOSH	OTHER
		TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³	IDLH mg/m ³	mg/m ³
Acrylonitrile Methacrylonitrile Methyl Methacrylate Polymer	38742-70-0	NE	NE	NE	NE	NE	NE	NE	NE
Bis(2-hydroxy-3-tert-butyl-5-methylphenyl) methane	119-47-1	NE	NE	NE	NE	NE	NE	NE	NE
1,3-Butadiene Homopolymer Hydroxy Terminated	69102-90-5	NE	NE	NE	NE	NE	NE	NE	NE
Diundecyl Phthalate	3648-20-2	NE	NE	NE	NE	NE	NE	NE	NE

NE = Not Established. See Section 16 for Definitions of Other Terms Used

8. EXPOSURE CONTROLS - PERSONAL PROTECTION (Continued)

CHEMICAL NAME	CAS #	EXPOSURE LIMITS IN AIR							
		ACGIH-TLVs		OSHA-PELs		NIOSH-RELS		NIOSH	OTHER
		TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³	TWA mg/m ³	STEL mg/m ³	IDLH mg/m ³	mg/m ³
Galvanized Steel	Mixture	NE	NE	NE	NE	NE	NE	NE	NE
Graphite	7782-42-5	2 (resp. fract.)	NE	15 mppcf (based on impinger samples counted by light field techniques)		2.5 (resp. dust)	NE	NE	DFG MAK: TWA = 1.5 (respirable fraction); 4 (inhalable fraction) DFG MAK Pregnancy Risk Classification: C
Methylene Bisphenyl Isocyanate	101-68-8	0.051	NE	NE	0.2 (ceiling)	0.05	0.2 (ceiling) 10 min.	75 ppm	DFG MAKs: TWA: 0.05 (inhalable fraction); Skin PEAK: 1•MAK 15 min. average value, 4 per shift, 1-hr interval, 0.1 (ceiling); Skin Danger of Sensitization of the Skin and Airways DFG MAK Pregnancy Risk Classification: C Carcinogen: EPA-D, EPA-CBD, IARC-3, MAK-4

NE = Not Established. See Section 16 for Definitions of Other Terms Used

International Occupational Exposure Limits: Currently, the following additional exposure limit values have been established by various countries for the components of this mixture. More current limits may be available; individual countries should be consulted to determine if newer limits are available. As with limits given previously in this Section, these limits are not necessarily applicable due to the form of the product.

GRAPHITE:

Belgium: TWA = 2 mg/m³ (resp. dust), MAR 2002
Denmark: TWA = 2.5 mg/m³ (respirable), MAY 2011
Finland: TWA = 2 mg/m³, NOV 2011
France: VME = 2 mg/m³, FEB 2006
Germany: MAK = 1.5 mg/m³, resp, 2011
Germany: MAK = 4 mg/m³, inhal, 2011
Iceland: TWA = 2.5 mg/m³ (resp. dust), NOV 2011
Japan: OEL = 0.5 mg/m³ (respirable), 2 mg/m³ (total), MAY 2012
Korea: TWA = 10 mg/m³, 2006
Korea: TWA = 2.5 mg/m³, 2006
Mexico: TWA = 2 mg/m³, 2004
The Netherlands: MAC-TGG = 2 mg/m³, 2003
New Zealand: TWA = 3 mg/m³ (respirable dust), JAN 2002
Peru: TWA = 2 mg/m³, JUL 2005
Sweden: TWA = 0.2 f/cc, JUN 2005
Sweden: TWA = 5 mg/m³, JUN 2005
Switzerland: MAK-W = 5 mg/m³, inhal, JAN 2011
Switzerland: MAK-W = 2.5 mg/m³, resp, JAN 2011
In Argentina, Bulgaria, Colombia, Jordan, Singapore, Vietnam check ACGIH TLV

METHYLENE BISPHENOL ISOCYANATE:

Australia: TWA = 0.02 mg(NCO)/m³, STEL 0.07 mg(NCO)/m³, JUL 2008
Austria: MAK-TMW = 0.005 ppm (0.05 mg/m³); KZW = 0.01 ppm (0.1 mg/m³), sen, 2007

METHYLENE BISPHENOL ISOCYANATE (continued):

Belgium: TWA = 0.005 ppm (0.052 mg/m³), MAR 2002
Denmark: TWA = 0.005 ppm (0.05 mg/m³), OCT 2002
France: VME = 0.01 ppm (0.1 mg/m³), VLE = 0.02 ppm (0.2 mg/m³), FEB 2006
Germany: MAK = 0.05 mg/m³, inhal, 2011
Hungary: TWA = 0.05 mg/m³, STEL = 0.05 mg/m³, SEP 2000
Iceland: TWA = 0.005 ppm (0.05 mg/m³), STEL = 0.01 ppm (0.1 mg/m³), sen, NOV 2011
Japan: OEL = 0.05 mg/m³, A1 sen, MAY 2012
Korea: TWA = 0.005 ppm (0.055 mg/m³), 2006
Mexico: TWA = 0.005 ppm (0.051 mg/m³), 2004
The Netherlands: MAC-TGG = 0.05 mg/m³, 2003
New Zealand: TWA = 0.02 mg(NCO)/m³, STEL = 0.07 mg(NCO)/m³, sen, JAN 2002
Peru: TWA = 0.005 ppm (0.051 mg/m³), JUL 2005
The Philippines: TWA = 0.02 ppm (0.2 mg/m³), JAN 1993
Poland: MAC(TWA) = 0.05 mg/m³, MAC(C) = 0.2 mg/m³, JAN 1999
Russia: STEL = 0.5 mg/m³, Skin, JUN 2003
Sweden: TWA = 0.002 ppm (0.03 mg/m³), CL = 0.005 ppm (0.05 mg/m³), Sen, JUN 2005
Switzerland: CL = 0.02 mg(NCO)/m³, skin, sen, JAN 2011
Thailand: TWA = 0.02 ppm (0.2 mg/m³), JAN 1993
In Argentina, Bulgaria, Colombia, Jordan, Singapore, Vietnam check ACGIH TLV

PROTECTIVE EQUIPMENT: *The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132, including U.S. Federal OSHA Respiratory Protection (29 CFR 1910.134), OSHA Eye Protection 29 CFR 1910.133, OSHA Hard Protection 29 CFR 1910.138, OSHA Foot Protection 29 CFR 1910.136 and OSHA Body Protection 29 CFR 1910.132), equivalent standards of Canada (including CSA Respiratory Standard Z94.4-02, Z94.3-M1982, Industrial Eye and Face Protectors and CSA Standard Z195-02, Protective Footwear), or standards of Japan (including JIS T 8116:2005 for glove selection, JIS T 8150:2006 for respiratory PPE, JIS T 8147:2003 for eye protectors, and JIS T 8030:2005 for protective clothing) standards of EU member states (including EN 529:2005 for respiratory PPE, CEN/TR 15419:2006 for hand protection, and CR 13464:1999 for face/eye protection), those of China, and Taiwan. Please reference applicable regulations and standards for relevant details.*

Respiratory Protection: Due to the form of this product, respiratory protection is not normally required. If heated and fumes are generated, maintain airborne contaminant concentrations below exposure limits listed above. For materials without listed exposure limits, minimize respiratory exposure. If necessary, use only respiratory protection authorized under appropriate regulations. Oxygen levels below 19.5% are considered IDLH by U.S. OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. OSHA's Respiratory Protection Standard (1910.134-1998).

Eye Protection: Wear splash goggles or safety glasses as appropriate for the task.

Hand Protection: Wash hands and wrists before putting on and after removing gloves. During manufacture or other similar operations, wear the appropriate hand protection for the process. Use double gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this SDS. Because all gloves are to some extent permeable and their permeability increases with time, they should be changed regularly (hourly is preferable) or immediately if torn or punctured. If necessary refer to appropriate regulations.

Skin Protection: Use appropriate protective clothing for the task (e.g., coveralls, etc.). If necessary, refer to the U.S. OSHA Technical Manual (Section VII: Personal Protective Equipment) or other appropriate regulations. Full-body chemical protective clothing is recommended for emergency response procedures. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA and Canadian Standards.

9. PHYSICAL and CHEMICAL PROPERTIES

FORM: Galvanized steel form lined with a rubberized solid.

MOLECULAR FORMULA: Mixture.

ODOR: Not available.

FLAMMABLE LIMITS (in air by volume, %): Not available.

DECOMPOSITION TEMPERATURE: Not available.

AUTOIGNITION TEMPERATURE: Not available.

FREEZING/MELTING POINT: Not available.

VAPOR PRESSURE: Not applicable.

VAPOR DENSITY (air = 1): Not applicable.

EVAPORATION RATE (n-BuAc = 1): Not applicable.

SOLUBILITY IN WATER: Insoluble.

COEFFICIENT WATER/OIL DISTRIBUTION: Not established.

HOW TO DETECT THIS SUBSTANCE (warning properties in event of accidental release): The appearance may be characteristic to distinguish a release of this product.

COLOR: RED.

MOLECULAR WEIGHT: Mixture.

ODOR THRESHOLD: Not available.

OXIDIZING PROPERTIES: Not applicable.

PERCENT VOLATILE: 0

FLASH POINT: Not available.

BOILING POINT: Not applicable.

SPECIFIC GRAVITY (water = 1): Not applicable.

CARB VOC: Not applicable.

SCAQMD (U.S. EPA Method 24): Not applicable.

SOLUBILITY IN SOLVENTS: Not applicable.

pH: Not applicable.

10. STABILITY and REACTIVITY

CHEMICAL STABILITY: This product is stable when properly stored at normal temperature and pressures (see Section 7, Handling and Storage).

DECOMPOSITION PRODUCTS: Combustion: If exposed to extremely high temperatures, thermal decomposition may generate irritating fumes and toxic gases (e.g., carbon, nitrogen and metal oxides, phthalates, ammonia, formaldehyde, hydrogen cyanide, nitriles, isocyanates, nitrosamines, hydrogen chloride, and acrylic monomers). Hydrolysis: None known.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: This product is incompatible with strong oxidizers.

POSSIBILITY OF HAZARDOUS POLYMERIZATION OR REACTION: Will not occur.

CONDITIONS TO AVOID: Avoid exposure to or contact with extreme temperatures and incompatible chemicals.

11. TOXICOLOGICAL INFORMATION

SYMPTOMS OF EXPOSURE BY ROUTE OF EXPOSURE: The health hazard information provided below is pertinent to employees using this product in an occupational setting. The following paragraphs describe the symptoms of exposure by route of exposure.

Inhalation: If this product is heated, inhalation of fumes or vapors may cause irritation of the nose, throat, and lungs and cause coughing. Due to the isocyanate component, inhalation of fumes may cause respiratory sensitization and allergic reaction.

Contact with Skin or Eyes: Due to the form of the product, contact with the eyes is unlikely, unless heating causes fumes. Fumes may cause tearing and stinging to the eyes. Although this product contains a skin sensitizer, due to form of the product, skin sensitization is not likely.

Skin Absorption: Due to form of product, skin absorption is not a likely route of exposure.

Ingestion: Ingestion is not a likely route of exposure, due to the form of the product.

Injection: Injection is not likely, due to the form of the product.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay Terms. Exposure to this product may cause the following health effects:

Acute: Inhalation of fumes or vapors may cause irritation of respiratory system and eyes.

Chronic: Inhalation of fumes may cause respiratory sensitization.

TARGET ORGANS: Acute: Skin, eyes, respiratory system. Chronic: Respiratory system.

TOXICITY DATA: No toxicity data are presented for components due to product form.

CARCINOGENICITY: Due to the physical nature of this product, carcinogenicity is not a hazard.

SENSITIZATION OF PRODUCT: Due to the isocyanate component, inhalation of fumes may cause respiratory sensitization and allergic reaction. Symptoms may include difficulty breathing, coughing and wheezing.

IRRITANCY OF PRODUCT: Inhalation of fumes or vapors may cause respiratory irritation and eye irritation.

REPRODUCTIVE TOXICITY INFORMATION: Components of this product have no reported mutagenic or teratogenic toxicity. As a phthalate compound, the Diundecyl Phthalate component may cause effects to the endocrine system, which can cause adverse reproductive effects. In addition, in animal studies, the Bis(2-hydroxy-3-tert-butyl-5-methylphenyl) methane component has caused adverse effects to fertility in males. Due to the form of this product, these effects are not likely to occur.

ACGIH BIOLOGICAL EXPOSURE INDICES (BEIs): Currently, there are no ACGIH Biological Exposure Indices (BEIs) determined for components. **DEGREE OF EFFECT TO THE HEALTH OF THE POLLUTING AGENT OF ENVIRONMENT OF WORK (per Mexican NOM-010 STPS-1999):** 0



HAZARDOUS MATERIAL IDENTIFICATION SYSTEM

HEALTH HAZARD	(BLUE)	1
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FLAMMABILITY HAZARD	(RED)	0
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PHYSICAL HAZARD	(YELLOW)	0
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PROTECTIVE EQUIPMENT

EYES	RESPIRATORY	HANDS	BODY
	SEE SECTION 8		SEE SECTION 8

For Routine Industrial Use and Handling Applications

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate
3 = Serious 4 = Severe * = Chronic hazard

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

MOBILITY: As an article, this product will not be mobile in soil.

PERSISTENCE AND BIODEGRADABILITY: No specific information is available regarding persistence and biodegradability.

BIO-ACCUMULATION POTENTIAL: This product has not been tested for bio-accumulation potential.

ECOTOXICITY: This product has not been tested for aquatic or animal toxicity. All releases to terrestrial, atmospheric and aquatic environments should be avoided.

OTHER ADVERSE EFFECTS: The components of this product are not listed as having ozone depletion potential.

RESULTS OF PBT and vPvB ASSESSMENT: The Methylene Biphenyl Isocyanate component is a Suspected PBT/vPvB compound. PBT and vPvB assessments are part of the chemical safety report required for some substances in European Union Regulation (EC) 1907/2006, Article 14.

ENVIRONMENTAL EXPOSURE CONTROLS: Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: It is the responsibility of the generator to determine at the time of disposal whether the product meets the criteria of a hazardous waste per regulations of the area in which the waste is generated and/or disposed of. Waste disposal must be in accordance with appropriate Federal, State, and local regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your local hazardous waste regulatory authority. Shipment of wastes must be done with appropriately permitted and registered transporters.

DISPOSAL CONTAINERS: Waste materials must be placed in and shipped in appropriate 5-gallon or 55-gallon poly or metal waste pails or drums. Permeable cardboard containers are not appropriate and should not be used. Ensure that any required marking or labeling of the containers be done to all applicable regulations.

PRECAUTIONS TO BE FOLLOWED DURING WASTE HANDLING: Wear proper protective equipment when handling waste materials.

U.S. EPA WASTE NUMBER: Not applicable.

EWC WASTE CODES: 16 01 21: Hazardous components other than those mentioned in 16 01 07 to 16 01 11 and 16 01 13 and 16 01 14

14. TRANSPORTATION INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION REGULATIONS: This product is not classified as dangerous goods, per U.S. DOT regulations, under 49 CFR 172.101.

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: This product is not classified as Dangerous Goods, per regulations of Transport Canada.

INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA): This product is not classified as dangerous goods under rules of IATA.

INTERNATIONAL MARITIME ORGANIZATION (IMO) DESIGNATION: This product is not classified as Dangerous Goods by the International Maritime Organization.

EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR): This product is not classified by the United Nations Economic Commission for Europe to be dangerous goods.

OFFICIAL MEXICAN STANDARD; REGULATION FOR THE TRANSPORT OF DANGEROUS GOODS AND RESIDUES: This product is not classified as Dangerous Goods, per transport regulations of Mexico.

SINGAPORE STANDARD 286: PART A: This product has no requirements under the Specification for Caution Labeling for Hazardous Substances, Part 4: Marking of Packages, Containers and Vehicles, as it does not meet the criteria for any hazard class under this regulation.

TRANSPORT IN BULK ACCORDING TO THE IBC CODE: See the information under the individual jurisdiction listings for IBC information.

ENVIRONMENTAL HAZARDS: This material does not meet the criteria of environmentally hazardous according to the criteria of the UN Model Regulations (as reflected in the IMDG Code, ADR, RID, and ADN) and is not listed in Annex III under MARPOL 73/78.

15. REGULATORY INFORMATION

UNITED STATES REGULATIONS:

U.S. SARA Reporting Requirements: As an article, this product is not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

U.S. SARA Hazard Categories (Section 311/312, 40 CFR 370-21): ACUTE: No; CHRONIC: No; FIRE: No; REACTIVE: No; SUDDEN RELEASE: No

U.S. SARA Threshold Planning Quantity (TPQ): As an article, this product is not subject to Threshold Planning Quantities, per 40 CFR 370.20.

U.S. CERCLA Reportable Quantity (RQ): Not applicable.

U.S. TSCA Inventory Status: Components of this product are listed on the TSCA Inventory.

California Safe Drinking Water and Toxic Enforcement Act (Proposition 65): No component is on the California Proposition 65 lists.

CANADIAN REGULATIONS:

Canadian DSL/NDSL Inventory Status: Components are on the DSL or NDSL Inventories.

Canadian Environmental Protection Act (CEPA) Priorities Substances Lists: Components are not on the CEPA Priorities Substances Lists.

Canadian WHMIS Classification and Symbols: As an article, this product is not subject the Controlled Product Regulations.

EUROPEAN REGULATIONS:

Safety, Health, and Environmental Regulations/Legislation Specific for the Product: Under Annex XVII of REACH, Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles, Entry 56, due to the Methylene Bisphenyl Isocyanate component, the following restrictions to the product apply in the EU:

1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging:
 - (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC (*);
 - (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures:
 - 'Persons already sensitised to diisocyanates may develop allergic reactions when using this product';
 - 'Persons suffering from asthma, eczema or skin problems should avoid contact';This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.'
2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives.

Chemical Safety Assessment: No data available. The chemical safety assessment is required for some substances according to European Union Regulation (EC) 1907/2006, Article 14.

REACH List of Pre-Registered Substances: Graphite: Registered; Methylene Bisphenyl Isocyanate: Registered; Bis(2-hydroxy-3-tert-butyl-5-methylphenyl) methane: Pre-registered; 1,3-Butadiene Homopolymer, Hydroxy Terminated, Galvanized Steel: No information; Diundecyl Phthalate: Pre-registered

CHINESE REGULATIONS:

Chinese Inventory of Existing Chemical Substances Status: As an article, this product is not subjected to requirements under the Chinese Inventory of Existing Chemical Substances (IECSC).

JAPANESE REGULATIONS:

Japanese ENCS: As an article, this product is not subjected to requirements under ENCS Inventory.

Japanese Ministry of Economy, Trade, and Industry (METI) Status: As an article, this product is not subjected to requirements under the Japanese METI.

Poisonous and Deleterious Substances Control Law: As an article, this product is not subjected to requirements under the Poisonous and Deleterious Substances Control Law.

KOREAN REGULATIONS:

Korean Existing Chemicals List (ECL) Status: As an article, this product is not subjected to requirements under the Korean ECL Inventory.

MEXICAN REGULATIONS:

Mexican Workplace Regulations (NOM-018-STPS-2000): This product is not classified as hazardous.

SINGAPORE REGULATIONS:

List of Controlled Hazardous Substances: As an article, this product is not subjected to requirements under the Singapore List of Controlled Substances.

Code of Practice On Pollution Control Requirements: As an article, this product is not subjected to requirements under the Singapore Code of Practice on Pollution Control.

TAIWANESE REGULATIONS:

Taiwan Existing Chemical Substances Inventory Status: As an article, this product is not subjected to requirements under the Taiwan Existing Chemicals List.

16. OTHER INFORMATION

LABELING (Precautionary Statements) ANSI LABELING (Z129.1): **CAUTION!** FUMES GENERATED BY HEATING MAY CAUSE MILD IRRITATION BY INHALATION AND EYE CONTACT. INHALATION OF FUMES MAY CAUSE RESPIRATORY SENSITIZATION IN PERSONS SUSCEPTIBLE TO ISOCYANATES. Avoid breathing fumes or vapors. Wear appropriate eye, hand, and body protection. Avoid exposure to elevated temperatures. **FIRST-AID:** In case of adverse effects after contact, flush skin or eyes with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Get medical attention if irritation develops or persists. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If swallowed, do not induce vomiting. Get medical attention. **IN CASE OF FIRE:** Use water fog, foam, dry chemical, or CO₂. **IN CASE OF SPILL:** Pick-up waste product and place in suitable container. Place residual in appropriate container and seal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations. Consult Safety Data Sheet for additional information.

GLOBAL HARMONIZATION, U.S. OSHA, JAPANESE JIS Z7253, EU REACH AND CLP REGULATION (EC) 1272/2208 AND THE TAIWAN REGULATION OF LABELING AND HAZARD COMMUNICATION OF DANGEROUS AND HARMFUL MATERIALS: This product has been classified per GHS Standards under U.S., European, Japanese and Taiwanese regulations. This product is an article and is not required to be classified under any regulations.

KOREAN ISHA (Notice 2009-68) LABELING AND CLASSIFICATION: As an article, this product is not subject to ISHA Notice 2009-68.

REVISION DETAILS: January 2017: Up-date SDS to include EU REACH and CLP 1272 compliance.

REFERENCES AND DATA SOURCES: Contact the supplier for information.

METHODS OF EVALUATING INFORMATION FOR THE PURPOSE OF CLASSIFICATION: Criteria of the GHS were used for classification.

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