

 Safety Data Sheet

 according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

 Revision Date: N/A
 Date of Issue: 12/21/2022

Version: 1.0

SECTION 1: IDENTIFICATION

Product Identifier

 Product Form: Mixture

 Product Name: Tread-Shield Top Coat VOC

 Product Code: 1814

 Intended Use of the Product

 Primer. For professional use only.

 Name, Address, and Telephone of the Responsible Party

 Manufacturer
 Supplier

 The Garland Company, Inc.
 The Garland Company

 3800 East 91st Street
 3800 East 91st Street

 Cleveland, Ohio 44105-2197
 Cleveland, Ohio 44105

T-800-762-8225 F-216-641-0633 www.garlandco.com

Emergency Telephone Number Emergency Number: 1-800-262-8200 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US): Flammable Liquid Cat 3 STOT SE Cat 3 Acute oral toxicity Cat 4 Serious eye irritation Cat 2A Acute toxicity inhalation Cat 4 Acute toxicity skin Cat 4 STOT RE Cat 2 Acute aquatic hazard Cat 3

Label Elements

GHS-US Labeling

The Garland Company, Inc. 3800 East 91st Street Cleveland, Ohio 44105-2197 T-800-762-8225 F-216-641-0633 www.garlandco.com

The Garland Company, Inc. 209 Carrier Drive Toronto, Ontario M9W 5Y8 T-416-747-7995 ; 800-387-5991 F-416-747-1980

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Hazard Pictograms (GHS-US)		
Signal Word (GHS-US) Hazard Statements (GHS-US)	 Warning H226: Flammable liquid and vapor H315: Causes skin irritation H312: Harmful in contact with skin H319: Causes serious eye irritation H317: May cause an allergic skin reaction H335: May cause respiratory irritation H371: May cause damage to organs (auditory) through prolonged or repeated exposure H302: Harmful if swallowed H332: Harmful if inhaled 	
Precautionary Statements (GHS-US)	 H402: Harmful to aquatic life 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 breathing dust/fume/gas/mist/vapours/spray P271 Use only outdoors or in a well-ventilated area. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. 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, water fog.for extinction. P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. P312 If Inhaled, Call a POISON CENTER or doctor/physician if you feel unwell. P330 Rinse mouth. P332 + P352 IF ON SKIN: wash with plenty of soap and water. P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention. P362 + P352 IF ON SKIN: wash with plenty of soap and water. P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention. P364 + P353 IF ON SKIN: wash with plenty of soap and water. P333 + P313 IF SKIN irritation or rash occurs: Get medical advice/attention. P364 + P353 IF onte contaminated clothing and wash it before reuse. P305 + P351 + P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if prese	
12/21/2022	Response:	f 1

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P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.

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

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minuts.

Remove contact lenses, if present and easy to do. Continue rinsing.

P321 - Specific treatment (see supplemental first aid instructions on this label).

P332 + P313 - If skin irritation occurs: Get medical advice/attention.

P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337 + P313 - If eye irritation persists: Get medical advice/attention.

P362 - Take off contaminated clothing and wash before reuse.

P363 - Wash contaminated clothing before reuse.

P391 - Collect spillage.

P501 - Dispose of contents/ container to an approved waste disposal plant.

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

P314 Get medical advice/attention if you feel unwell.

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component

HAZARDOUS INGREDIENTS:	CAS#	Weight %
Polyester Polyol		25-70
Methyl N-Amyl Ketone	110-43-0	7-13
Xylene	1330-20-7	5-10
Ethyl 3-Ethoxypropionate	763-69-9	3-7
Propylene Glycol Monomethyl Ether Acetate	108-65-6	3-7
Ethyl Benzene	100-41-4	<0.5
Siloxanes and silicones, di-me reaction products with silica	67762-90-7	0.1-1
Siloxanes and silicones, di- methyl	63148-62-9	0.1-1
4,6-dimethyl-2-heptanone	19549-80-5	0.1-1
Dibutylin Dilurate	77-58-7	0.1-1
Cellulose Acetate Butyrate	9004-36-8	0.1-1
Additive		0.1-1
	Colors may contain at 10-30%	

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Titanium Dioxide	13463-67-7	<1.0
Carbon	1333-86-4	<1.0

Composition Comments: Exact concentrations and chemical identities of ingredients not listed above are either classified as non-hazardous or are withheld as a trade secret as covered by OSHA's Hazard Communication Standard, 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: If you feel unwell, seek medical advice (show the label where possible).

Inhalation: REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY

Skin Contact: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Removecontaminated clothing. Launder contaminated clothing before re-use.

Eye Contact: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation develops.

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

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Foam, alcohol foam, CO2, Dry Chemical, Water, Fog

Advice for Firefighters

Fire Fighting Procedures: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray to disperse vapors and protect those stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing includes helmets, protective boots, and gloves will provide a basic level of protection for chemical incidents.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Personal precautions:	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid contact with skin and eyes.
	spilled material. Avolu contact with skill and eyes.
Environmental precautions	
Environmental precautions:	Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain spilled material if possible. Remove all sources of ignition and ventilate the area Absorb with materials such as: Dirt. Vermiculite. Sand.

Methods for Cleaning Up:Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills
immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb
spillage with non-combustible, absorbent material. The contaminated absorbent may pose the
same hazard as the spilled material. Collect and place in suitable waste disposal containers and
seal securely. Label the containers containing waste and contaminated materials and remove
from the area as soon as possible. Flush contaminated area with plenty of water. Wash
thoroughly after dealing with a spillage. For waste disposal, see Section 13.

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Reference to Other Sections:

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

General Handling: Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink, and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Suspected of causing cancer. May damage fertility. May damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on General Occupational Hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for Safe Storage

General: Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed in a cool, well ventilated place. Keep containers upright. Protect containers from damage. This product polymerizes when in contact with moisture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS/GUIDELINES:

HAZARDOUS INGREDIENTS:	CAS#	OSHA PEL	ACGIH TLV	OSHA STEL
Polyester Polyol		None	None	None
Methyl N-Amyl Ketone	110-43-0	100 PPM	50 PPM	None
Xylene	1330-20-7	100 PPM	100 PPM	150 PPM
Ethyl 3-Ethoxypropionate	763-69-9	None	None	None
Propylene Glycol Monomethyl Ether Acetate	108-65-6	50 PPM	None	None
Ethyl Benzene	100-41-4	100 PPM	100 PPM	125 PPM
Siloxanes and silicones, di- me reaction products with silica	67762-90-7	None	None	None
Siloxanes and silicones, di- methyl	63148-62-9	None	None	None
4,6-dimethyl-2-heptanone	19549-80-5	None	None	None
Dibutylin Dilurate	77-58-7	0.1 mg/m3	0.1 mg/m3	0.1 mg/m3
Cellulose Acetate Butyrate	9004-36-8	None	None	None
Additive		None	None	None
Titanium Dioxide	13463-67-7	10 mg/m3	10 mg/m3	5 mg/m3
Carbon	1333-86-4	3.5 PPM	3.4 PPM	None

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Control Parameters

Occupational Exposure Limits

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

PHYSICAL STATE:	Liquid
APPEARANCE & ODOR:	Viscous liquid with ketone solvent odor
ODOR THRESHOLD (PPM):	Not Available
FLASH POINT:	Not Available
AUTOIGNITION TEMPERATURE:	Not Established
VAPOR PRESSURE (mmHg):	Not Available
VAPOR DENSITY:	Not Available
EVAPORATION RATE (nBuAc = 1): BOILING POINT (F°):	Not Available 279-375
FREEZING POINT (C°):	Not Available
pH:	Not Available
SPECIFIC GRAVITY 20°C: (WATER =1)	1.2
SOLUBILITY IN WATER (%)	Not Available
EXPLOSIVE PROPERTIES:	Not Available
OXIDISING PROPERTIES:	Not Available

SECTION 10: STABILITY AND REACTIVITY

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Reactivity: No additional information available.

Chemical Stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of Hazardous Reactions: No potentially hazardous reactions known.

Conditions to Avoid: Avoid excessive heat or open flames as well as all sources of ignition such as sparks, heaters, and static discharges.

Incompatible Materials: Can react vigorously with strong oxidizing agents and phosphorous containing materials.

Hazardous Decomposition Products: Does not decompose when used and stored as recommended. Thermal decomposition may produce harmful gases or vapors.

SECTION 11. TOXICOLOGICAL INFORMATION

<u>Toxicity</u>

Specific Component Data:

CAS# 9038-95-3: Acute oral toxicity LD50 = 5370 mg/kg (rat);

Acute dermal toxicity LD50 = 21000 mg/kg (rabbit);

Acute inhalation toxicity LC50 = 4670 ppm (rat)

CAS# 108-83-6	
Acute oral toxicity LD50 = 5800 mg/kg (rat);	
Acute dermal toxicity LD50 = 16000 mg/kg (rabbit);	
Acute inhalation toxicity LC50 = 2000 ppm (rat)	

Xylene
Acute Dermal Toxicity LD50 2000 mg/kg
Acute Oral toxicity LD50 4.3 g/kg
Acute inhalation Toxicity LC50 26800ppm

Ethyl Benzene
Acute Oral toxicity LD50: ca. 3500 mg/kg (rat);
Acute Dermal Toxicity: 17,800 mg/kg (rabbit)
Acute inhalation Toxicity LC50: 17.2 mg/l 4h (rat);

Dibutylin Dilurate
Acute Oral toxicity (LD50,RAT) 3200.00 MG/KG
Acute Dermal Toxicity (LD50,RABBIT) >2000 MG/KG (NO DEATHS)
Acute inhalation Toxicity (LC50, RAT) >8.10 MG/L/1 HR

Cellulose Acetate Butyrate Ester
Acute Oral toxicity LD-50: (Rat): > 3,200 mg/kg (highest dose tested)
Acute Dermal Toxicity LD-50: (Guinea Pig): > 1,000 mg/kg (highest dose tested).

CAS# 110-43-0

Acute Oral toxicity LD 50 (rat): 1600 mg/kg; Oral LD50 (mouse) 730 mg/kg
Acute Dermal Toxicity LD50 (rabbit) 10206 mg/kg; Dermal LD50 (guinea pig) >16200 mg/kg
Acute inhalation Toxicity LC50 (rat) 2000-4000 ppm, 4 hr

additive

Acute oral toxicity: LD50 rat>8,000,000 mg/kg

Light stabilizer

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Acute oral toxicity:LD50 / oral / rat: > 2,000 mg/kg (Based on components).

4-chlorobenzotrifluoride

Acute Oral toxicity Rat LD50 >6700 mg/kg.

Acute Dermal Toxicity Rabbit LD50 > 2,700 mg/kg.

Acute inhalation Toxicity rat LC50 (4 hr) = 4,370 ppm

Information on Toxicological Effects – Product

TOXICITY DATA: Toxicity data is not available for this product:

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes, and respiratory system. **SENSITIZATION OF PRODUCT:** This product is considered a skin sensitizer.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Specific Component Data:

Xylene

Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l

Aquatic Invertabrates: Toxic 1 < LC/EC/IC50 <10mg/I

Algae: Toxic 1 < LC/EC/IC50 <10 mg/l

Ethyl Benzene

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).

CAS# 110-43-0

Acute Aquatic Effects: 96 hr LC50 (fathead minnow) 131 mg/l and 48 hr EC50 (daphnia) >90 mg/l (highest concentration tested) BOD-5: 1770 mg/kg; BOD-20: 2000 mg/kg; COD: 2420 mg/kg

4-chlorobenzotrifluoride

This compound is harmful to fish, Daphnia, and algae. Relatively biodegradable. This substance is not expected to bioaccumulate.

Insoluble in water; water volatility may be high

In a chronic fish study in Pimephales promelas, the NOEC and LOEC values were found to be 0.54 mg/l and 1.4 mg/l, respectively

Persistence and Degradability

No known applicable information.

Mobility in Soil

Mobility in Soil: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Waste generation should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Unused and Contaminated Product: Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: TRANSPORRT INFORMATION

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14.1 In Accordance with DOT		
Proper Shipping Name	:	Flammable Liquid N.O.S. (contains xylene, ethyl benzene)
Hazard Class	:	3
Identification Number	:	UN 1993
Packing Group	:	3
14.2 In Accordance with IMDG		
Proper Shipping Name	:	Flammable Liquid N.O.S. (contains xylene, ethyl benzene)
Hazard Class	:	3
Identification Number	:	UN 1993
Packing Group	:	3
14.3 In Accordance with IATA		
Proper Shipping Name	:	Flammable Liquid N.O.S. (contains xylene, ethyl benzene)
Hazard Class	:	3
Identification Number	:	UN 1993
Packing Group	:	3
SECTION 15. REGULATORY IN		ΜΑΤΙΩΝ

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

OSHA 29 CFR 1910-1200 - See section 2

TSCA – All components of this product are listed on TSCA Inventory.

CERCLA Reportable Quantity – Xylene – 1000 lb RQ

SARA Title III: Section 302 Extremely Hazardous Substances – None Section 304 – Not applicable. Section 311/312 – Acute health and Chronic Health Section 313 – Xylene, 1.0% threshold value

RCRA – Refer to section 13. **US State Regulations**

Component data:

State Right to Know:

Component	Massachusetts	New Jer	sey Pennsylvania	Illinois	Rhode Island
Epoxy Resin		Х	X		
SECTION 16: OT	HER INFORMAT	ION			
Revision Date		: 12/22	L/2022		
Other Information			ocument has been prepa ements of the OSHA Haz .200.		
Party Responsible f	for the	: The Ga	arland Company, Inc.		
Preparation of This	Document	3800 E	ast 91 st Street		
		Clevel	and, Ohio 44105-2197		
		T-1800)-762-8225		
		F-216-	641-0633		

This information is based on our knowledge as of the Revision Date and is intended to describe the product only for the purposes of health, safety and environmental requirements as of the Revision Date. It should not therefore be construed as guaranteeing any specific property of the product nor as providing any warranty, expressed or implied. The user assumes all responsibility, liability, risk of loss, damage, or expense arising out of, or in any way connected with, the handling, storage, use, or disposal of the product.

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North America GHS US 2019 & WHMIS

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SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Mixture Product Name: Tread-Shield Top Coat VOC Part B Product Code: 1814 Intended Use of the Product Primer. For professional use only.

Name, Address, and Telephone of the Responsible Party

Manufacturer The Garland Company, Inc. 3800 East 91st Street Cleveland, Ohio 44105-2197 T-800-762-8225 F-216-641-0633 www.garlandco.com Supplier The Garland Company, Inc. 3800 East 91st Street Cleveland, Ohio 44105-2197 T-800-762-8225 F-216-641-0633 www.garlandco.com

The Garland Company, Inc. 209 Carrier Drive Toronto, Ontario M9W 5Y8 T-416-747-7995 ; 800-387-5991 F-416-747-1980

Emergency Telephone Number Emergency Number: 1-800-262-8200 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US):

Flammable Liquid	Cat 3
STOT SE	Cat 3
Acute oral toxicity	Cat 4
Serious eye irritation	Cat 2B
Acute toxicity inhalation	Cat 4
Acute toxicity skin	Cat 4
STOT RE	Cat 2
Acute aquatic hazard	Cat 3
Chronic aquatic hazard	Cat 3

Label Elements

GHS-US Labeling Hazard Pictograms (GHS-US)

 Signal Word (GHS-US)
 : Danger

 Hazard Statements (GHS-US)
 : H226: Flammable liquid and vapor

 H315: Causes skin irritation
 H319: Causes serious eye irritation

 H317: May cause an allergic skin reaction

- H335: May cause respiratory irritation
- H371: May cause damage to organs (auditory) through prolonged or repeated exposure
- H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled H332: Harmful if inhaled

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H402: Harmful to aquatic life H412: Harmful to aquatic life with long lasting effects P102 Keep out of reach of children. **Precautionary Statements (GHS-US)** 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. P271 Use only outdoors or in a well-ventilated area. P260 Do not breathe dust/fume/gas/mist/vapours/spray P284 Wear respiratory protection P264 Wash hands thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves and clothing to prevent skin contact. 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. P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. P312 If inhaled, Call a POISON CENTER or doctor/physician if you feel unwell. P314 Get medical advice/attention if you feel unwell P302 + P352 IF ON SKIN: wash with plenty of soap and water P312 Call a POISON CENTER or doctor/physician if you feel unwell P361+P364 Take off immediately all contaminated clothing and wash it before reuse P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. P342 + P311 IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician. 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. 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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component

HAZARDOUS INGREDIENTS:	CAS#	Weight %
Homopolymer of HDI	28182-81-2	60-100
*Xylene	1330-20-7	10-15
Ethyl benzene (component of xylene)	100-41-4	<2.0
n-butyl acetate	123-86-4	7-13
*Hexamethylene Diisocyanate (HDI)	822-06-0	<1.0

 *Indicates toxic chemical(s) subject to reporting requirements of section 313 Title III and of 40 CFR 372. XYLENE ACGIH STEL=150 PPM

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Description of First Aid Measures

General: If you feel unwell, seek medical advice (show the label where possible).

Inhalation: REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY

Skin Contact: Wash skin thoroughly after handling. Seek medical attention if irritation develops and persists. Removecontaminated clothing. Launder contaminated clothing before re-use.

Eye Contact: If product enters the eyes, open eyes while under gentle running water for at least 15 minutes. Seek medical attention if irritation develops.

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

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Foam, alcohol foam, CO2, Dry Chemical, Water, Fog

Advice for Firefighters

Fire Fighting Procedures: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray to disperse vapors and protect those stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing includes helmets, protective boots, and gloves will provide a basic level of protection for chemical incidents.

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Personal precautions, protective	equipment, and emergency procedures
Personal precautions:	Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid contact with skin and eyes.
Environmental precautions	
Environmental precautions:	Avoid discharge into drains or watercourses or onto the ground. Avoid discharge to the aquatic environment.
Methods and Materials for Co	ntainment and Cleaning Up
For Containment: Contain spille	d material if possible. Remove all sources of ignition and ventilate the area Absorb with materials
such as: Dirt. Vermiculite. Sand.	
Methods for Cleaning Up:	Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.
Reference to Other Sections:	For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

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General Handling: Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink, and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Suspected of causing cancer. May damage fertility. May damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on General Occupational Hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for Safe Storage

General: Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed in a cool, well ventilated place. Keep containers upright. Protect containers from damage. This product polymerizes when in contact with moisture.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

HAZARDOUS INGREDIENTS: CAS# **OSHA PEL** ACGIH TLV **OSHA STEL** Homopolymer of HDI 28182-81-2 1 mg/m3 None None 100 ppm 150 ppm *Xylene 100 ppm 1330-20-7 Ethyl benzene (component 100 ppm 125 ppm 100 ppm 100-41-4 of xylene) 150 ppm 200 ppm n-butyl acetate 150 ppm 123-86-4 *Hexamethylene 0.005 ppm none None 822-06-0 Diisocyanate (HDI)

EXPOSURE LIMITS/GUIDELINES:

Control Parameters

Occupational Exposure Limits

VENTILATION AND ENGINEERING CONTROLS: Use with adequate ventilation to ensure exposure levels are maintained below the limits provided above. Use local exhaust ventilation to control airborne vapor. Ensure eyewash/safety shower stations are available near areas where this product is used.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

EYE PROTECTION: Safety glasses or chemical goggles as appropriate to prevent eye contact. If necessary, refer to U.S. OSHA 29 CFR 1910.133 or appropriate Canadian Standards.

HAND PROTECTION: Use chemical resistant gloves to prevent skin contact. If necessary, refer to U.S. OSHA 29 CFR 1910.138 or appropriate Standards of Canada.

BODY PROTECTION: Use body protection appropriate to prevent contact (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

PHYSICAL STATE:

Liquid

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APPEARANCE & ODOR:	Pale yellow liquid with solvent odor
ODOR THRESHOLD (PPM):	Not Available
FLASH POINT:	Not Available
AUTOIGNITION TEMPERATURE:	Not Established
VAPOR PRESSURE (mmHg):	Not Available
VAPOR DENSITY:	Not Available
EVAPORATION RATE (nBuAc = 1): BOILING POINT (F°):	Not Available 280
FREEZING POINT (C°):	Not Available
pH:	Not Available
SPECIFIC GRAVITY 20°C: (WATER =1)	1.1
SOLUBILITY IN WATER (%)	Not Available
EXPLOSIVE PROPERTIES:	Not Available
OXIDISING PROPERTIES:	Not Available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No additional information available.

Chemical Stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of Hazardous Reactions: No potentially hazardous reactions known.

Conditions to Avoid: Avoid excessive heat or open flames as well as all sources of ignition such as sparks, heaters, static discharges, etc.

Incompatible Materials: Avoid water, amines, strong bases, alcohols, metal compounds, and surface active compounds. **Hazardous Decomposition Products**: May form toxic chemicals, carbon dioxide carbon monoxide, oxides of nitrogen, HCN and HDI.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicity

Specific Component Data:

n-Butyl Acetate

Acute oral LD50 > 5000 mg/kg (rat),

Acute Dermal Toxicity LD50 > 5000 mg/kg (rabbit)

Acute Inhalation Toxicity: LC50 > 23.4 mg/l, 4hh (rat),

Xylene

Acute oral LD50 4.3 g/kg
Acute Dermal Toxicity LD50 2000 mg/kg
Acute Inhalation Toxicity: LC50 26800ppm

Ethyl	Benzene

Acute oral LD50: ca. 3500 mg/kg (rat);	
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Acute Dermal Toxicity 17,800 mg/kg (rabbit);

Acute Inhalation Toxicity: LC50: 17.2 mg/l 4h (rat);

Information on Toxicological Effects – Product

TOXICITY DATA: Toxicity data is not available for this product:

IRRITANCY OF PRODUCT: Contact with this product can be irritating to exposed skin, eyes, and respiratory system. **SENSITIZATION OF PRODUCT:** This product is considered a skin sensitizer.

SECTION 12: ECOLOGICAL INFORMATION

EcoToxicity

Specific Component Data:

Homopolymer of HDI

Acute and Prolonged Tocicity to fish LC0 > 100 mg/l (zebra fish, 96 h)

Acute toxicity to aquatic invertebrates: EC0 > 100 mg/l (water flea, 48 hr)

Toxicity to aquatic plants EC50 > 1000 mg/l (green algae, 72 h)

Toxicity to Microorganisms: EC50 > 1000 mg/l (activated sludge microorganisms, 3 h)

Acute and Prolonged Toxicity to Fish LC50: 18 mg/l (fathead Minnow, 96 h).

Acute Toxicity to Aquatic Invertabrate EC50: 72.8 mg/l (water flea, 48 h)

Toxicity to aquatic plants EC50: 670 mg/l, end point: growth (Crytomonad, 48 h)

Toxicity to Microorganisms EC50: 959 mg/l (Pseudomonas putida, 48 h).

Xylene	
Acute Toxicity: Fish: Toxic 1 < LCECIC50 < 10mg/l,	
Aquatic Invertabrates: Toxic 1 < LC/EC/IC50 <10mg/l,	
Algae: Toxic 1 < LC/EC/IC50 <10 mg/l	

Ethyl Benzene

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).

Product Data

Persistence and Degradability

No known applicable information.

Mobility in Soil

Mobility in Soil: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Waste generation should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Unused and Contaminated Product: Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: TRANSPORRT INFORMATION

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14.1 In Accordance with DOT	
Proper Shipping Name :	Flammable Liquid N.O.S. (contains xylene, ethyl benzene)
Hazard Class :	3
Identification Number :	UN 1993
Packing Group :	3
14.2 In Accordance with IMDG	
Proper Shipping Name :	Flammable Liquid N.O.S. (contains xylene, ethyl benzene)
Hazard Class :	3
Identification Number :	UN 1993
Packing Group	3
14.3 In Accordance with IATA	
Proper Shipping Name :	Flammable Liquid N.O.S. (contains xylene, ethyl benzene)
Hazard Class :	3
Identification Number :	UN 1993
Packing Group :	3
SECTION 15: REGULATORY INFOR	MATION
US Federal Regulations	

OSHA 29 CFR 1910-1200 - See section 2

TSCA – All components of this product are listed on TSCA Inventory.

CERCLA Reportable Quantity – Xylene RG – 100 lb, n-butyl acetate RQ – 5000 lb, Ethyl benzene RQ – 1000 lbs

SARA Title III: Section 302 Extremely Hazardous Substances – None

Section 304 – Not applicable.

Section 311/312 – Acute health and Chronic Health

Section 313 - Xylene, ethyl benzene

RCRA – Refer to section 13.

US State Regulations

California Prop 65: This product contains chemicals known to the State of California to be carcinogenic: Ethyl Benzene CAS# 100-41-4 @ 1-5%.

Component data:

State Right to Know:

Massachusetts	New York	Pennsylvania	Illinois	Rhode Island
Х	Х	Х		
Х	Х	Х		
Х	Х	Х		
Х	Х	Х		
-	X X X X X X	New YorkXXXXXXXXXX	New YorkPennsylvaniaXXXXXXXXXXXXXXX	New YorkPennsylvaniaInitioisXXXXXXXXXXXXXXXXXXXX

SECTION 16: OTHER INFORMATION

Revision Date	: 12/21/2022
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR
	1910.1200.
Party Responsible for the	: The Garland Company, Inc.
Preparation of This Document	3800 East 91 st Street
	Cleveland, Ohio 44105-2197
	T-1800-762-8225
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This information is based on our knowledge as of the Revision Date and is intended to describe the product only for the purposes of health, safety and environmental requirements as of the Revision Date. It should not therefore be construed as guaranteeing any specific property of the product nor as providing any warranty, expressed or implied. The user assumes all responsibility, liability, risk of loss, damage, or expense arising out of, or in any way connected with, the handling, storage, use, or disposal of the product.