From: Katie Jeziorski <KJeziorski@trinityconsultants.com>
Sent: Tuesday, August 22, 2023 3:29 PM
To: John Ma
Cc: Joshua Glubiak
Subject: TCEQ Air Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 site
Attachments: Chemlok 290 - Effective Date 10-04-2021.pdf; Chemlok 286 - Effective 4-24-2020.pdf; Chemlok 289 - Effective Date 10-04-2021.pdf; C-600 - Revision 6-04-2018.pdf

John,

Thanks for the call. Attached are the SDS used in the calculations, which we reviewed/evaluated to obtain a worst-case representation. For the cleaning question, since there is such low volume of adhesive used in this repair process, no cleaning solvent is needed. Therefore, all VOCs are accounted for.

If you have any questions, please let us know. We appreciate your prompt review of this application.

Thanks,
Katie

Katie Jeziorski
Managing Consultant
Business Development Manager
P 972.661.8100 M 936.537.4513 (preferred)
12700 Park Central Dr., Ste. 600, Dallas, TX, 75251
Email: kjeziorski@trinityconsultants.com
LinkedIn: https://www.linkedin.com/in/katie-jeziorski-63863b35/

Trinity Consultants

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From: Joshua Glubiak <JOSHUA.GLUBIAK@TRIN.NET>
Sent: Monday, August 14, 2023 12:49 PM
To: Katie Jeziorski <KJeziorski@trinityconsultants.com>; Lyndsie Slater <LSlater@trinityconsultants.com>
Subject: FW: [EXTERNAL]: RE: TCEQ Air Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 site

Josh Glubiak
Program Manager, EHS
Trinity Corporate Services
14221 N. Dallas Pkwy, Suite 1100

Dallas, TX 75254
Direct Office: (214) 589-6532
Email: Joshua.Glubiak@trin.net

From: John Ma <John.Ma@Tceq.Texas.Gov>
Sent: Monday, August 14, 2023 11:26 AM
To: Joshua Glubiak <JOSHUA.GLUBIAK@TRIN.NET>
Cc: Crystal DelaCruz <Crystal.DelaCruz@tceq.texas.gov>
Subject: [EXTERNAL]: RE: TCEQ Air Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 site

CAUTION: This email originated from an external sender.

Good morning,

I am the TCEQ Air Permit Reviewer assigned to the PBR Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 in Orange County, Texas. You have been identified as a Technical Contact.

I have completed my initial review for this project and will need additional information/clarification before I can proceed with my review. Please address the following:

- The process description states that the site repairs the rubber liners of railcars. Please confirm that there are no other repair activities at the site. If there are other repair activities, please include an updated process description and their applicable PBRs.

Failure to submit all of the requested information by **August 21, 2023** may result in the TCEQ closing the application with a deficiency. After TCEQ closes the application, you may re-apply through STEERS by filing a new application Form PI-7/PI-7 CERT (General Application for Registration for Permits by Rule) and any additional information necessary to demonstrate compliance with the requirements in 30 TAC Chapter 106. TCEQ will retain the original permit fee for six months and you will not need to submit additional fees with the new application if the original fee was paid correctly.

If you have questions or would like to discuss this project over the phone, feel free to contact me.

Mr. John Ma
Rule Registration Team
Air Permits Division, Office of Air, TCEQ
(512) 239-4686
John.Ma@tceq.texas.gov

How are we doing? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/customersurvey

CAUTION: This email originated from outside of the Trinity Consultants organization. Do not click links or open attachments unless you recognize the sender's name, sender's email address and know the content is safe.

USA SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CHEMLOK 290**
Product Use/Class: **Adhesive**

LORD Corporation
111 LORD Drive
Cary, NC 27511-7923 USA

Telephone: 814 868-3180
Non-Transportation Emergency: 814 763-2345
Chemtrec 24 Hr Transportation Emergency No.
800 424-9300 (Outside Continental U.S. 703 527-3887)

EFFECTIVE DATE: 10/04/2021

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquids Category 2
Acute toxicity Inhalation - Dust and Mist Category 4
Acute toxicity Inhalation - Vapours Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Skin sensitization Category 1A
Respiratory sensitization Category 1
Reproductive toxicity Category 2
Specific target organ systemic toxicity (single exposure) Category 3
Specific target organ systemic toxicity (single exposure) Category 1 Central nervous system, Respiratory system
Specific target organ systemic toxicity (repeated exposure) Category 1 Central nervous system, Kidney, Nervous system, Respiratory system
Hazardous to the aquatic environment - acute hazard Category 2
Hazardous to the aquatic environment - chronic hazard Category 2

GHS LABEL ELEMENTS:

Symbol(s)

Signal

Hazard Statements

Highly flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of damaging fertility or the unborn child.
May cause harm to breast-fed children.
May cause drowsiness or dizziness.
May cause respiratory irritation.
Causes damage to organs.(Central nervous system, Respiratory system)
Causes damage to organs through prolonged or repeated exposure.(Central nervous system, Kidney, Nervous system, Respiratory system)

Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation wear respiratory protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response

In case of fire: refer to section 5 of SDS for extinguishing media.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF exposed: Call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Collect spillage.

Storage

Store in a well-ventilated place. Keep cool.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: May be fatal if inhaled in confined spaces. Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma.May be harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: May cause liver damage. Prolonged or repeated contact may result in dermatitis.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
Toluene	108-88-3	90 - 95 %
Methyl methacrylate	80-62-6	1 - 5 %

Any "PROPRIETARY" component(s) in the above table is considered trade secret, thus the specific chemical and its exact concentration is being withheld.

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog
UNSUITABLE EXTINGUISHING MEDIA: Not determined for this product.

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of this Safety Data Sheet. Contain and remove with inert absorbent material and non-sparking tools.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. Use with adequate ventilation. Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored.

STORAGE: Do not store or use near heat, sparks, or open flame. Store only in well-ventilated areas. Do not puncture, drag, or slide container. Keep container closed when not in use. Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	Skin

Toluene	20 ppm	N.E.	200 ppm	300 ppm	N.A.
Methyl methacrylate	50 ppm	100 ppm	410 mg/m3 100 ppm	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. For respirator use observe OSHA regulations (29CFR 1910.134) or use in accordance with applicable laws and regulations of your country or particular locality.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact. If contact with the product is prolonged or repeated, Silver Shield or Butyl rubber gloves are recommended.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Solvent	**VAPOR PRESSURE:**	N.D.
APPEARANCE:	Red	**VAPOR DENSITY:**	Heavier than Air
PHYSICAL STATE:	Liquid	**LOWER EXPLOSIVE LIMIT:**	1.2 %(V)
FLASH POINT:	44 °F, 6 °C Setaflash Closed Cup	**UPPER EXPLOSIVE LIMIT:**	8.2 %(V)
BOILING RANGE:	111 °C	**EVAPORATION RATE:**	Not Applicable
AUTOIGNITION TEMPERATURE:	N.D.	**DENSITY:**	0.88 g/cm3 (7.32 lb/gal)
DECOMPOSITION TEMPERATURE:	N.D.	**VISCOSITY, DYNAMIC:**	≥25 mPa.s @ 25 °C
ODOR THRESHOLD:	N.D.	**VISCOSITY, KINEMATIC:**	≥28 mm2/s @ 25 °C
SOLUBILITY IN H2O:	Insoluble	**VOLATILE BY WEIGHT:**	92.50 %
pH:	N.A.	**VOLATILE BY VOLUME:**	93.64 %
FREEZE POINT:	N.D.	**VOC CALCULATED:**	6.79 lb/gal, 813 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures. Sources of ignition.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	LD50/LC50
Toluene	Oral LD50: Rat 2,600 mg/kg Dermal LD50: Rabbit 12,000 mg/kg Inhalation LC50: Rat 12.5 mg/l /4 h
Methyl methacrylate	Oral LD50: Rat 8,420 - 10,000 mg/kg Dermal LD50: Rabbit > 5 g/kg Dermal LD50: Rabbit 5,000 - 7,500 mg/kg Inhalation LC50: Rat 78 mg/l /4 h Inhalation LC50: Rat 7093 ppm/4 h

Germ cell mutagenicity: No classification proposed

Carcinogenicity: No classification proposed

Reproductive toxicity: Category 2 - Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.

Components contributing to classification: Toluene. Methanol.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Toluene	Fish: Pimephales promelas 15.22 - 19.05 mg/l96 h flow-through Pimephales promelas 12.6 mg/l96 h Static Oncorhynchus mykiss 5.89 - 7.81 mg/l96 h flow-through Oncorhynchus mykiss 14.1 - 17.16 mg/l96 h Static Oncorhynchus mykiss 5.8 mg/l96 h semi-static Lepomis macrochirus 11.0 - 15.0 mg/l96 h Static Oryzias latipes 54 mg/l96 h Static Poecilia reticulata 28.2 mg/l96 h semi-static Poecilia reticulata 50.87 - 70.34 mg/l96 h Static Invertebrates: Daphnia magna 5.46 - 9.83 mg/l48 h Static Daphnia magna 11.5 mg/l48 h Plants: Pseudokirchneriella subcapitata > 433 mg/l96 h Pseudokirchneriella subcapitata 12.5 mg/l72 h Static
Methyl methacrylate	Fish: Pimephales promelas 243 - 275 mg/l96 h flow-through Pimephales promelas 125.5 - 190.7 mg/l96 h Static Lepomis macrochirus 170 - 206 mg/l96 h flow-through Lepomis macrochirus 153.9 - 341.8 mg/l96 h Static Oncorhynchus mykiss > 79 mg/l96 h flow-through Oncorhynchus mykiss > 79 mg/l96 h Static Poecilia reticulata 326.4 - 426.9 mg/l96 h Static Invertebrates: Daphnia magna 69 mg/l48 h Plants: Pseudokirchneriella subcapitata 170 mg/l96 h

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. TRANSPORT INFORMATION

US DOT Road

Proper Shipping Name:	Adhesives
Hazard Class:	3
SECONDARY HAZARD:	None
UN/NA Number:	1133
Packing Group:	II
Emergency Response Guide Number:	128

IATA Cargo

PROPER SHIPPING NAME:	Adhesives
Hazard Class:	3
HAZARD CLASS:	None
UN NUMBER:	1133
PACKING GROUP:	II
EMS:	3L

IMDG

PROPER SHIPPING NAME:	Adhesives
Hazard Class:	3
HAZARD CLASS:	None
UN NUMBER:	1133
PACKING GROUP:	II
EMS:	F-E

The listed transportation classification applies to non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372.:

Chemical Name	CAS Number	Weight % Less Than
Toluene	108-88-3	95.0 %
Methyl methacrylate	80-62-6	5.0 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

The chemical substances in this product are on the active TSCA Section 8 Inventory or exempt.

EXPORT NOTIFICATION

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 3 PHYSICAL HAZARD: 0
* - Indicates a chronic hazard; see Section 2

Revision: Section 2, Section 11

Effective Date: 10/04/2021

DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

USA SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CHEMLOK 289**
Product Use/Class: **Primer for Adhesive**

LORD Corporation
111 LORD Drive
Cary, NC 27511-7923 USA

Telephone: 814 868-3180
Non-Transportation Emergency: 814 763-2345
Chemtrec 24 Hr Transportation Emergency No.
800 424-9300 (Outside Continental U.S. 703 527-3887)

EFFECTIVE DATE: 10/04/2021

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquids Category 2
Acute toxicity Inhalation - Dust and Mist Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Skin sensitization Category 1
Respiratory sensitization Category 1
Germ cell mutagenicity Category 2
Carcinogenicity Category 1B
Reproductive toxicity Category 2
Specific target organ systemic toxicity (single exposure) Category 3
Specific target organ systemic toxicity (single exposure) Category 1 Kidney, Liver, Respiratory system, Central nervous system, Systemic toxicity
Specific target organ systemic toxicity (repeated exposure) Category 1 Kidney, Respiratory system, Nervous system, Hematopoietic System
Specific target organ systemic toxicity (repeated exposure) Category 2 Ears, Liver, spleen
Hazardous to the aquatic environment - acute hazard Category 2

GHS LABEL ELEMENTS:

Symbol(s)

Signal

Hazard Statements

Highly flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing genetic defects.
May cause cancer.
Suspected of damaging fertility or the unborn child.
May cause harm to breast-fed children.
May cause respiratory irritation.

May cause drowsiness or dizziness.
Causes damage to organs.(Kidney, Liver, Respiratory system, Central nervous system, Systemic toxicity)
Causes damage to organs through prolonged or repeated exposure.(Kidney, Respiratory system, Nervous system, Hematopoietic System)
May cause damage to organs through prolonged or repeated exposure.(Ears, Liver, spleen)
Toxic to aquatic life.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
In case of inadequate ventilation wear respiratory protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response

In case of fire: refer to section 5 of SDS for extinguishing media.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF exposed: Call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

Store in a well-ventilated place. Keep cool.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: May be fatal if inhaled in confined spaces. Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma. Harmful if absorbed through skin.May be harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: May affect the gastrointestinal system. Epichlorohydrin has been classified by IARC as probable human carcinogens (Group 2A), and by NTP as reasonably anticipated human carcinogens. Ethylbenzene has been classified by IARC as a possible human carcinogen (Group 2B) and reported by NTP to show clear evidence for carcinogenicity in animals. ACGIH considers Ethyl alcohol to be an A3 carcinogen (confirmed animal carcinogen with unknown relevance in humans).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
Xylene	1330-20-7	30 - 35 %
Methyl ethyl ketone	78-93-3	20 - 25 %
Isopropyl alcohol	67-63-0	10 - 15 %
Ethyl benzene	100-41-4	5 - 10 %
Epoxy resin	PROPRIETARY	1 - 5 %
Epichlorohydrin	106-89-8	1 - 5 %
Phenolic resin	9003-35-4	0.1 - 0.9 %
Ethyl alcohol	64-17-5	0.1 - 0.9 %
Epoxy resin	PROPRIETARY	0.1 - 0.9 %

Any "PROPRIETARY" component(s) in the above table is considered trade secret, thus the specific chemical and its exact concentration is being withheld.

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog
UNSUITABLE EXTINGUISHING MEDIA: Not determined for this product.

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer

to hazard caution information in other sections of this Safety Data Sheet. Contain and remove with inert absorbent material and non-sparking tools.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. Use with adequate ventilation. Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored.

STORAGE: Do not store or use near heat, sparks, or open flame. Store only in well-ventilated areas. Do not puncture, drag, or slide container. Keep container closed when not in use. Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements.

INCOMPATIBILITY: Strong oxidizers, acids, bases, water.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	Skin
Xylene	100 ppm	150 ppm	435 mg/m3 100 ppm	N.E.	N.A.
Methyl ethyl ketone	200 ppm	300 ppm	590 mg/m3 200 ppm	N.E.	N.A.
Isopropyl alcohol	200 ppm	400 ppm	980 mg/m3 400 ppm	N.E.	N.A.
Ethyl benzene	20 ppm	N.E.	435 mg/m3 100 ppm	N.E.	N.A.
Epoxy resin	N.E.	N.E.	N.E.	N.E.	N.A.
Epichlorohydrin	0.5 ppm	N.E.	19 mg/m3 5 ppm	N.E.	S
Phenolic resin	N.E.	N.E.	N.E.	N.E.	N.A.
Ethyl alcohol	N.E.	1,000 ppm	1,900 mg/m3 1,000 ppm	N.E.	N.A.
Epoxy resin	N.E.	N.E.	N.E.	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. For respirator use observe OSHA regulations (29CFR 1910.134) or use in accordance with applicable laws and regulations of your country or particular locality.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Solvent	**VAPOR PRESSURE:**	N.D.
APPEARANCE:	Green	**VAPOR DENSITY:**	Heavier than Air
PHYSICAL STATE:	Liquid	**LOWER EXPLOSIVE LIMIT:**	1 %(V)
FLASH POINT:	33 °F, 0 °C Setaflash Closed Cup	**UPPER EXPLOSIVE LIMIT:**	19 %(V)
BOILING RANGE:	80 - 141 °C	**EVAPORATION RATE:**	Not Applicable
AUTOIGNITION TEMPERATURE:	N.D.	**DENSITY:**	0.93 g/cm3 (7.70 lb/gal)
DECOMPOSITION TEMPERATURE:	N.D.	**VISCOSITY, DYNAMIC:**	≥20 mPa.s @ 25 °C
ODOR THRESHOLD:	N.D.	**VISCOSITY, KINEMATIC:**	≥22 mm2/s @ 25 °C
SOLUBILITY IN H2O:	Insoluble	**VOLATILE BY WEIGHT:**	75.84 %
pH:	N.A.	**VOLATILE BY VOLUME:**	85.22 %
FREEZE POINT:	N.D.	**VOC CALCULATED:**	5.84 lb/gal, 700 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures. Sources of ignition.

INCOMPATIBILITY: Strong oxidizers, acids, bases, water.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, chlorine, hydrogen chloride, Phosgene

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	LD50/LC50
Xylene	Oral LD50: Rat 3,500 mg/kg Dermal LD50: Rabbit > 4,350 mg/kg Inhalation LC50: Rat 29.08 mg/l /4 h
Methyl ethyl ketone	Oral LD50: Rat 2,483 mg/kg Dermal LD50: Rabbit 5,000 mg/kg Inhalation LC50: Rat 11700 ppm/4 h
Isopropyl alcohol	Oral LD50: Rat 1,870 mg/kg Dermal LD50: Rabbit 4,059 mg/kg Inhalation LC50: Rat 72,600 mg/m3 /4 h
Ethyl benzene	Oral LD50: Rat 3,500 mg/kg Dermal LD50: Rabbit 15,400 mg/kg Inhalation LC50: Rat 17.4 mg/l /4 h
Epoxy resin	N.D.
Epichlorohydrin	Oral LD50: Rat 90 mg/kg

	Dermal LD50: Rabbit 515 mg/kg Inhalation LC50: Rat 0.95 mg/l /4 h
Phenolic resin	Oral LD50: Rat > 5 g/kg Dermal LD50: Rat > 2 g/kg Dermal LD50: Rat > 2,000 mg/kg
Ethyl alcohol	Oral LD50: Rat 7,060 mg/kg Inhalation LC50: Rat 124.7 mg/l /4 h
Epoxy resin	Oral LD50: Rat 5,000 mg/kg Dermal LD50: Rabbit 20 mL/kg Dermal LD50: Rabbit 23,600 mg/kg

Germ cell mutagenicity: Category 2 - Suspected of causing genetic defects.
Components contributing to classification: Epichlorohydrin.

Carcinogenicity: Category 1B - May cause cancer.
Components contributing to classification: Ethyl benzene. Epichlorohydrin.

Reproductive toxicity: Category 2 - Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.
Components contributing to classification: Xylene. Isopropyl alcohol. Ethyl benzene. Epichlorohydrin. Toluene. Phenol.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Xylene	Fish: Pimephales promelas 13.4 mg/l96 h flow-through Oncorhynchus mykiss 2.661 - 4.093 mg/l96 h Static Oncorhynchus mykiss 13.5 - 17.3 mg/l96 h Lepomis macrochirus 13.1 - 16.5 mg/l96 h flow-through Lepomis macrochirus 19 mg/l96 h Lepomis macrochirus 7.711 - 9.591 mg/l96 h Static Pimephales promelas 23.53 - 29.97 mg/l96 h Static Cyprinus carpio 780 mg/l96 h semi-static Cyprinus carpio > 780 mg/l96 h Poecilia reticulata 30.26 - 40.75 mg/l96 h Static Invertebrates: water flea 3.82 mg/l48 h Gammarus lacustris 0.6 mg/l48 h
Methyl ethyl ketone	Fish: Pimephales promelas 3,130 - 3,320 mg/l96 h flow-through Invertebrates: Daphnia magna > 520 mg/l48 h Daphnia magna 5,091 mg/l48 h Daphnia magna 4,025 - 6,440 mg/l48 h Static
Isopropyl alcohol	Fish: Pimephales promelas 9,640 mg/l96 h flow-through Pimephales promelas 11,130 mg/l96 h Static Lepomis macrochirus > 1,400,000 µg/l96 h Invertebrates: Daphnia magna 13,299 mg/l48 h Plants: Desmodesmus subspicatus > 1,000 mg/l96 h Desmodesmus subspicatus > 1,000 mg/l72 h
Ethyl benzene	Fish: Oncorhynchus mykiss 11.0 - 18.0 mg/l96 h Static Oncorhynchus mykiss 4.2 mg/l96 h semi-static Pimephales promelas 7.55 - 11 mg/l96 h flow-through Lepomis macrochirus 32 mg/l96 h Static Pimephales promelas 9.1 - 15.6 mg/l96 h Static Poecilia reticulata 9.6 mg/l96 h Static Plants: Pseudokirchneriella subcapitata 4.6 mg/l72 h Pseudokirchneriella subcapitata > 438 mg/l96 h
Epoxy resin	N.D.
Epichlorohydrin	Fish: Lepomis macrochirus 35 mg/l96 h Static Lepomis macrochirus 35 mg/l96 h semi-static Brachydanio rerio 30.5 mg/l96 h Static Pimephales promelas 9.1 - 12.3 mg/l96 h Static Invertebrates: Daphnia magna 24 mg/l48 h
Phenolic resin	N.D.
Ethyl alcohol	Fish: Pimephales promelas > 100 mg/l96 h Static Pimephales promelas 13,400 - 15,100 mg/l96 h flow-through Invertebrates: Daphnia magna 9,268 - 14,221 mg/l48 h Daphnia magna 2 mg/l48 h Static
Epoxy resin	Fish: Oncorhynchus mykiss 24 mg/l96 h flow-through

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. TRANSPORT INFORMATION

US DOT Road

Proper Shipping Name:	Adhesives
Hazard Class:	3
SECONDARY HAZARD:	None
UN/NA Number:	1133
Packing Group:	II
Emergency Response Guide Number:	128

IATA Cargo

PROPER SHIPPING NAME:	Adhesives
Hazard Class:	3
HAZARD CLASS:	None
UN NUMBER:	1133
PACKING GROUP:	II
EMS:	3L

IMDG

PROPER SHIPPING NAME:	Adhesives
Hazard Class:	3
HAZARD CLASS:	None
UN NUMBER:	1133
PACKING GROUP:	II
EMS:	F-E

The listed transportation classification applies to non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372.:

Chemical Name	CAS Number	Weight % Less Than
Xylene	1330-20-7	35.0 %
Isopropyl alcohol	67-63-0	15.0 %
Ethyl benzene	100-41-4	10.0 %
Epichlorohydrin	106-89-8	5.0 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS
The chemical substances in this product are on the active TSCA Section 8 Inventory or exempt.

EXPORT NOTIFICATION
This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 3 PHYSICAL HAZARD: 0
* - Indicates a chronic hazard; see Section 2

Revision: Section 2, Section 11, Section 12

Effective Date: 10/04/2021

DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

USA SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **CHEMLOK 286**
Product Use/Class: **Tacky Tie Cement**

LORD Corporation
111 LORD Drive
Cary, NC 27511-7923 USA

Telephone: 814 868-3180
Non-Transportation Emergency: 814 763-2345
Chemtrec 24 Hr Transportation Emergency No.
800 424-9300 (Outside Continental U.S. 703 527-3887)

EFFECTIVE DATE: 04/24/2020

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquids Category 2
Acute toxicity Inhalation - Dust and Mist Category 4 - 10.8% of the mixture consists of ingredient(s) of unknown toxicity.
Acute toxicity Inhalation - Vapours Category 4 - 10.8% of the mixture consists of ingredient(s) of unknown toxicity.
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Reproductive toxicity Category 2
Specific target organ systemic toxicity (single exposure) Category 3
Specific target organ systemic toxicity (single exposure) Category 1 Central nervous system
Specific target organ systemic toxicity (single exposure) Category 3
Specific target organ systemic toxicity (repeated exposure) Category 1 Central nervous system, Kidney
Hazardous to the aquatic environment - acute hazard Category 2
Hazardous to the aquatic environment - chronic hazard Category 2

GHS LABEL ELEMENTS:

Symbol(s)

Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
Suspected of damaging fertility or the unborn child.
May cause harm to breast-fed children.
May cause respiratory irritation.
Causes damage to organs.(Central nervous system)
May cause drowsiness or dizziness.
Causes damage to organs through prolonged or repeated exposure.(Central nervous system, Kidney)
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Wear protective gloves/protective clothing/eye protection/face protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.

Response

In case of fire: refer to section 5 of SDS for extinguishing media.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF exposed: Call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Collect spillage.

Storage

Store in a well-ventilated place. Keep cool.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: May be fatal if inhaled in confined spaces. Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma. Harmful if absorbed through skin.May be harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: May cause liver damage. IARC has designated carbon black as Group 2B - inadequate evidence for carcinogenicity in humans, but sufficient evidence in experimental animals. In 2006 IARC reaffirmed its 1995 finding that there is "inadequate evidence" from human health studies to assess whether carbon black causes cancer in humans. Further, epidemiological evidence from well-conducted investigations has shown no causative link between carbon black exposure and the risk of malignant or non-malignant respiratory disease in humans.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
Toluene	108-88-3	80 - 85 %
Polyisoprene	PROPRIETARY	5 - 10 %
Carbon black	1333-86-4	1 - 5 %

Any "PROPRIETARY" component(s) in the above table is considered trade secret, thus the specific chemical and its exact concentration is being withheld.

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam, Water Fog
UNSUITABLE EXTINGUISHING MEDIA: Not determined for this product.

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the SDS form. Contain and remove with inert absorbent material and non-sparking tools.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage. Ground and bond containers when transferring material. Avoid skin and eye contact. Wash thoroughly after handling. Avoid breathing of vapor or spray mists. Do not handle until all safety precautions have been read and understood. Empty containers should not be re-used. Use with adequate ventilation. Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container. Do not smoke where this product is used or stored. WARNING--Application of this product within a tank or other confined space must comply with the requirements of the OSHA Permit-Required Confined Spaces Standard, 29 CFR 1910.146.

STORAGE: Do not store or use near heat, sparks, or open flame. Store only in well-ventilated areas. Do not puncture, drag, or slide container. Keep container closed when not in use. Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-	ACGIH TLV-	OSHA PEL-	OSHA PEL-	Skin

	TWA	STEL	TWA	CEILING	
Toluene	20 ppm	N.E.	200 ppm	300 ppm	N.A.
Polyisoprene	N.E.	N.E.	N.E.	N.E.	N.A.
Carbon black	3 mg/m3	N.E.	3.5 mg/m3	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. For respirator use observe OSHA regulations (29CFR 1910.134) or use in accordance with applicable laws and regulations of your country or particular locality.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Solvent	**VAPOR PRESSURE:**	N.D.
APPEARANCE:	Black	**VAPOR DENSITY:**	Heavier than Air
PHYSICAL STATE:	Liquid	**LOWER EXPLOSIVE LIMIT:**	1.2 %(V)
FLASH POINT:	40 °F, 4 °C Setaflash Closed Cup	**UPPER EXPLOSIVE LIMIT:**	7 %(V)
BOILING RANGE:	111 °C	**EVAPORATION RATE:**	Not Applicable
AUTOIGNITION TEMPERATURE:	N.D.	**DENSITY:**	0.9 g/cm3 - 7.47 lb/gal
DECOMPOSITION TEMPERATURE:	N.D.	**VISCOSITY, DYNAMIC:**	≥450 mPa.s @ 25 °C
ODOR THRESHOLD:	N.D.	**VISCOSITY, KINEMATIC:**	≥500 mm2/s @ 25 °C
SOLUBILITY IN H2O:	Insoluble	**VOLATILE BY WEIGHT:**	85.00 %
pH:	N.A.	**VOLATILE BY VOLUME:**	87.63 %
FREEZE POINT:	N.D.	**VOC CALCULATED:**	6.35 lb/gal, 761 g/l
COEFFICIENT OF WATER/OIL DISTRIBUTION:	N.D.		

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures. Sources of ignition.

INCOMPATIBILITY: Strong acids, bases, and strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide, carbon dioxide

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	LD50/LC50
Toluene	Oral LD50: Rat 2,600 mg/kg Dermal LD50: Rabbit 12,000 mg/kg Inhalation LC50: Rat 12.5 mg/l /4 h
Polyisoprene	N.D.
Carbon black	Oral LD50: Rat > 15,400 mg/kg Dermal LD50: Rabbit > 3 g/kg GHS LC50 (vapour): Acute toxicity point estimate 55 mg/l

Germ cell mutagenicity: No classification proposed

Carcinogenicity: No classification proposed

Reproductive toxicity: Category 2 - Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.

Components contributing to classification: Toluene.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	Ecotoxicity
Toluene	Fish: Pimephales promelas 15.22 - 19.05 mg/l96 h flow-through Pimephales promelas 12.6 mg/l96 h Static Oncorhynchus mykiss 5.89 - 7.81 mg/l96 h flow-through Oncorhynchus mykiss 14.1 - 17.16 mg/l96 h Static Oncorhynchus mykiss 5.8 mg/l96 h semi-static Lepomis macrochirus 11.0 - 15.0 mg/l96 h Static Oryzias latipes 54 mg/l96 h Static Poecilia reticulata 28.2 mg/l96 h semi-static Poecilia reticulata 50.87 - 70.34 mg/l96 h Static Invertebrates: Daphnia magna 5.46 - 9.83 mg/l48 h Static Daphnia magna 11.5 mg/l48 h Plants: Pseudokirchneriella subcapitata > 433 mg/l96 h Pseudokirchneriella subcapitata 12.5 mg/l72 h Static
Polyisoprene	N.D.
Carbon black	N.D.

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. TRANSPORT INFORMATION

US DOT Road

Proper Shipping Name:	Adhesives
Hazard Class:	3
SECONDARY HAZARD:	None
UN/NA Number:	1133
Packing Group:	II
Emergency Response Guide Number:	128

IATA Cargo

PROPER SHIPPING NAME:	Adhesives
Hazard Class:	3
HAZARD CLASS:	None
UN NUMBER:	1133
PACKING GROUP:	II
EMS:	3L

IMDG

PROPER SHIPPING NAME:	Adhesives
Hazard Class:	3
HAZARD CLASS:	None
UN NUMBER:	1133
PACKING GROUP:	II
EMS:	F-E

The listed transportation classification applies to non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

SARA SECTION 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372.:

Chemical Name	CAS Number	Weight % Less Than
Toluene	108-88-3	85.0 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS

The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

None

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 3 PHYSICAL HAZARD: 0

* - Indicates a chronic hazard; see Section 2

Revision: Section 2, Section 11

Effective Date: 04/24/2020

DISCLAIMER

The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

Polycorp - C-600

SECTION 1. IDENTIFICATION

Product Identifier	Polycorp - C-600
Other Means of Identification	Cement
Recommended Use	Adhesive.
Manufacturer	Polycorp Ltd., 33 York Street West, Elora, Ontario, N0B 1S0, Canada
Emergency Phone No.	CHEMTREC, 1-800-424-9300
SDS No.	C-600

SECTION 2. HAZARD IDENTIFICATION

Classification

Flammable liquid - Category 3; Skin irritation - Category 2; Carcinogenicity - Category 2; Reproductive toxicity - Category 2; Aspiration hazard - Category 1; Aquatic hazard (Chronic) - Category 2

Label Elements

Signal Word:
Danger

Hazard Statement(s):
H225 Highly flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H302 + H332 Harmful if swallowed or if inhaled.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statement(s):
Prevention:
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response:
P308 + P313 IF exposed or concerned: Get medical advice or attention.
Storage:
P405 Store locked up.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	LC50	LD50 (Oral)
Xylene (mixed isomers)	1330-20-7	45-70%	6350 ppm (male rat) (4-hour exposure)	3523 mg/kg (rat)
Ethylbenzene	100-41-4	10-30%	4000 ppm (rat) (4-hour exposure)	3500 mg/kg (rat)
Chloroform	67-66-3	0.1-1.0%	1540 ppm (rat) (4-hour exposure)	908 mg/kg (rat)

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist. If experiencing respiratory symptoms (e.g. coughing, shortness of breath, wheezing), call a Poison Centre or doctor. If breathing is difficult, trained personnel should administer emergency oxygen if advised to do so by Poison Centre or doctor.

Skin Contact

Immediately rinse with lukewarm, gently flowing water for 15-20 minutes. Take off immediately contaminated clothing, shoes and leather goods (e.g. watchbands, belts). If skin irritation or a rash occurs, get medical advice or attention.

Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. If eye irritation persists, get medical advice or attention.

Ingestion

Get medical advice or attention if you feel unwell or are concerned. Immediately call a Poison Centre or doctor. Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Rinse mouth with water. Do not induce vomiting.

First-aid Comments

Get medical advice or attention if you feel unwell or are concerned.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Carbon dioxide, dry chemical powder, appropriate foam, water spray or fog.

Unsuitable Extinguishing Media

Water is not effective for extinguishing a fire. It may not cool product below its flash point.

Specific Hazards Arising from the Product

May accumulate in hazardous amounts in low-lying areas especially inside confined spaces, resulting in a fire and/or health hazard. Can be ignited by static discharge.
Not known to generate any hazardous decomposition products in a fire.

Special Protective Equipment and Precautions for Fire-fighters

Use extreme caution.
Fire-fighters may enter the area if positive pressure SCBA and full Bunker Gear is worn.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Non-emergency personnel: use the personal protective equipment recommended in Section 8 of this safety data sheet.

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Eliminate all ignition sources if safe to do so.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Flush spill area. Collect using shovel/scoop or approved HEPA vacuum and place in a suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Do NOT eat, drink or store food in work areas. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Conditions for Safe Storage

Store in original tightly closed container separate from incompatible materials (see Section 10: Stability and Reactivity). Store in an area that is: well-ventilated, clear of combustible and flammable materials (e.g. old rags, cardboard).

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Not available.

Appropriate Engineering Controls

General ventilation is usually adequate.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots. Wear fire resistant or flame retardant clothing.

Respiratory Protection

Wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Other Information

Physical State Solid

SECTION 10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions of use, storage, and transport.

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

None expected under normal conditions of storage and use.

Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources. Generation of dust. Incompatible materials. High temperatures.

Incompatible Materials

Increased risk of fire and explosion on contact with: oxidizing agents (e.g. peroxides).

Hazardous Decomposition Products

Very toxic carbon monoxide, carbon dioxide; corrosive phosgene; corrosive hydrogen chloride.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
Xylene (mixed isomers)	6350 ppm (male rat) (4-hour exposure)	3523 mg/kg (rat)	Not available
Ethylbenzene	4000 ppm (rat) (4-hour exposure)	3500 mg/kg (rat)	15380 mg/kg (rabbit)
Chloroform	1540 ppm (rat) (4-hour exposure)	908 mg/kg (rat)	Not available

Skin Corrosion/Irritation

Human experience shows very mild irritation.

Serious Eye Damage/Irritation

Human experience shows serious eye irritation.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

May cause nose and throat irritation.

Ingestion

May be harmful based on human experience and animal tests.

STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

Respiratory and/or Skin Sensitization

Not known to be a skin sensitizer.
Human experience shows severe asthma or asthma-like symptoms (respiratory sensitization) in rare cases following exposure at work.

Carcinogenicity

May cause cancer.

Reproductive Toxicity

Development of Offspring

May harm the unborn child.

Sexual Function and Fertility

May cause effects on sexual function and/or fertility.

Germ Cell Mutagenicity

Not known to be a mutagen.

SECTION 12. ECOLOGICAL INFORMATION

Environmental information was not located. See Supplemental Information in Section 2.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of contents and container in accordance with local, regional, national and international regulations. Empty containers retain product residue. Follow label warnings even if container appears to be empty.

SECTION 14. TRANSPORT INFORMATION

Not regulated under IATA Regulations.

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1133	ADHESIVES	3	III
Canadian TDG	1133	ADHESIVES	3	III

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

This product is not known to be a “Hazardous Chemical” as defined by OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Canada

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

All ingredients are listed on the DSL/NDSL.

CEPA - National Pollutant Release Inventory (NPRI)

(Xylene (mixed isomers)) Part 5.
(Ethylbenzene) Part 1A.
(Chloroform) Part 1A.

USA

Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

SECTION 16. OTHER INFORMATION

SDS Prepared By	Polycorp Ltd.
Date of Preparation	May 23, 2018
Date of Last Revision	June 04, 2018
Disclaimer	Polycorp cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in this sheet was written based on the best knowledge and experience currently available.

From: Joshua Glubiak <JOSHUA.GLUBIAK@TRIN.NET>
Sent: Monday, August 14, 2023 1:19 PM
To: John Ma
Subject: RE: [EXTERNAL]: RE: TCEQ Air Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 site

Follow Up Flag: Follow up
Flag Status: Completed

John,

There are no other activities requiring an air permit and/or PBR.

Josh Glubiak
Program Manager, EHS
Trinity Corporate Services
14221 N. Dallas Pkwy, Suite 1100
Dallas, TX 75254
Direct Office: (214) 589-6532
Email: Joshua.Glubiak@trin.net

From: John Ma <John.Ma@Tceq.Texas.Gov>
Sent: Monday, August 14, 2023 11:26 AM
To: Joshua Glubiak <JOSHUA.GLUBIAK@TRIN.NET>
Cc: Crystal DelaCruz <Crystal.DelaCruz@tceq.texas.gov>
Subject: [EXTERNAL]: RE: TCEQ Air Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 site

CAUTION: This email originated from an external sender.

Good morning,

I am the TCEQ Air Permit Reviewer assigned to the PBR Permit No. 173604 / Project No. 361780 at Trinity Industries Plant 117 in Orange County, Texas. You have been identified as a Technical Contact.

I have completed my initial review for this project and will need additional information/clarification before I can proceed with my review. Please address the following:

- The process description states that the site repairs the rubber liners of railcars. Please confirm that there are no other repair activities at the site. If there are other repair activities, please include an updated process description and their applicable PBRs.

Failure to submit all of the requested information by **August 21, 2023** may result in the TCEQ closing the application with a deficiency. After TCEQ closes the application, you may re-apply through STEERS by filing a new application Form PI-7/PI-7 CERT (General Application for Registration for Permits by Rule) and any additional information necessary to demonstrate compliance with the requirements in 30 TAC Chapter 106. TCEQ will retain the original permit fee for six months and you will not need to submit additional fees with the new application if the original fee was paid correctly.

If you have questions or would like to discuss this project over the phone, feel free to contact me.

Mr. John Ma
Rule Registration Team
Air Permits Division, Office of Air, TCEQ
(512) 239-4686
John.Ma@tceq.texas.gov

How are we doing? Fill out our online customer satisfaction survey at
www.tceq.texas.gov/customersurvey