

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product name: **LORD 7713**  
Product Use/Class: **Adhesion Promoter**

LORD Corporation  
111 LORD Drive  
Cary, NC 27511-7923

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:** 04/28/2015

**2. HAZARDS IDENTIFICATION****GHS CLASSIFICATION:**

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 1A  
Reproductive toxicity Category 1B  
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 Respiratory system, Central nervous system, Liver  
Aspiration hazard Category 1  
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**

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.  
May damage fertility or the unborn child.  
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.(Respiratory system, Central nervous system, Liver)  
May be fatal if swallowed and enters airways.

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

## Precautionary Statements

### Prevention

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/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

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: Wash with plenty of soap and water.  
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.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
Do NOT induce vomiting.  
Take off contaminated clothing and wash before reuse.  
Collect spillage.

### Storage

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:** 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. Contains methylene chloride. Excessive exposure may cause carboxyhemoglobinemia, a condition which impairs the blood's ability to transport oxygen. Very high levels of exposure to methylene chloride may cause cardiac arrhythmias. 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. Allergic conditions can occur in certain individuals with high sensitivity to isocyanates; this may result in asthma-like symptoms. Animal tests have indicated that respiratory sensitization can result from skin contact with certain isocyanates. May be absorbed through the skin in harmful amounts. May cause lung damage.

**Chronic:** May cause kidney damage. May cause long-term lung damage. May affect the blood and blood-forming organs. Prolonged or repeated contact may result in dermatitis. Trichloroethylene has been classified by IARC as a human carcinogen (Group 1) and by NTP as a reasonably anticipated human carcinogen. 1,2 butylene oxide has been classified by IARC as a possible human carcinogen (Group 2B) and reported by NTP to show clear evidence for carcinogenicity in animals. Methylene chloride has been classified for carcinogenicity by IARC and by NTP as sufficient evidence for carcinogenicity in experimental animals; insufficient evidence in humans. Use of this product should comply with the OSHA Methylene Chloride Standard, 29CFR1910.1052. May affect the gastrointestinal system.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Range</u>
Trichloroethylene	79-01-6	50 - 55 %
Methylene chloride	75-09-2	35 - 40 %
Aromatic polyisocyanate	PROPRIETARY	1 - 5 %
4,4'-Diphenylmethane diisocyanate	101-68-8	1 - 5 %
1,2-Butylene oxide	106-88-7	0.1 - 1 %
2,4-Diphenylmethane diisocyanate	5873-54-1	0.1 - 1 %

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

**SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL:** Keep containers tightly closed. 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. 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. Avoid using pressurizable equipment which has aluminum or zinc parts; this product contains chlorinated solvents. Use with adequate ventilation.

**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.

**INCOMPATIBILITY:** Amines, acids, water, hydroxyl, or active hydrogen compounds. Aluminum, zinc, caustics, halogens.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	Skin
Trichloroethylene	10 ppm	25 ppm	100 ppm	200 ppm	N.A.
Methylene chloride	50 ppm	N.E.	25 ppm	N.E.	N.A.
Aromatic polyisocyanate	N.E.	N.E.	N.E.	N.E.	N.A.
4,4'-Diphenylmethane diisocyanate	0.005 ppm	N.E.	N.E.	0.2 mg/m <sup>3</sup> 0.02 ppm	N.A.
1,2-Butylene oxide	N.E.	N.E.	N.E.	N.E.	N.A.
2,4-Diphenylmethane diisocyanate	N.E.	N.E.	N.E.	0.2 mg/m <sup>3</sup> 0.02 ppm	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.

### PERSONAL PROTECTION MEASURES/EQUIPMENT:

**RESPIRATORY PROTECTION:** This product contains isocyanates which have poor odor warning properties. If occupational exposure limits are exceeded, a NIOSH approved supplied-air respirator is required. 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. Observe OSHA regulations (29CFR 1910.134) for respirator use. An air-supplied respirator is required where occupational limits are exceeded. Contains methylene chloride, which has poor odor warning properties.

**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.

<b>ODOR:</b>	Sweet	<b>VAPOR PRESSURE:</b>	N.D.
<b>APPEARANCE:</b>	Purple	<b>VAPOR DENSITY:</b>	Heavier than Air
<b>PHYSICAL STATE:</b>	Liquid	<b>LOWER EXPLOSIVE LIMIT:</b>	1.5 %(V)
<b>FLASH POINT:</b>	≥ 201 °F, 93 °C	<b>UPPER EXPLOSIVE LIMIT:</b>	44.8 %(V)

<b>BOILING RANGE:</b>	Setaflash Closed Cup 40 - 87 °C	<b>EVAPORATION RATE:</b>	Faster than n-butyl-acetate.
<b>AUTOIGNITION TEMPERATURE:</b>	N.D.	<b>DENSITY:</b>	1.37 g/cm <sup>3</sup> - 11.38 lb/gal
<b>DECOMPOSITION TEMPERATURE:</b>	N.D.	<b>VISCOSITY, DYNAMIC:</b>	≥20 mPa.s @ 25 °C
<b>ODOR THRESHOLD:</b>	N.D.	<b>VISCOSITY, KINEMATIC:</b>	≥15 mm <sup>2</sup> /s @ 25 °C
<b>SOLUBILITY IN H<sub>2</sub>O:</b>	Insoluble	<b>VOLATILE BY WEIGHT:</b>	86.34 %
<b>pH:</b>	N.A.	<b>VOLATILE BY VOLUME:</b>	84.38 %
<b>FREEZE POINT:</b>	N.D.	<b>VOC CALCULATED:</b>	9.14 lb/gal, 1,096 g/l
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b>	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:** Aluminum or galvanized parts in a closed system.; High temperatures.

**INCOMPATIBILITY:** Amines, acids, water, hydroxyl, or active hydrogen compounds.; Aluminum, zinc, caustics, halogens.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Monomeric isocyanate, traces of hydrogen cyanide, nitrogen dioxide, Phosgene, 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:**

<b>Chemical Name</b>	<b>LD50/LC50</b>
Trichloroethylene	Oral LD50: Rat 4,290 mg/kg Oral LD50: Rat 5,400 - 7,200 mg/kg Dermal LD50: Rabbit > 20 g/kg Dermal LD50: Rabbit 29,000 mg/kg Inhalation LC50: Rat 26 mg/l /4 h
Methylene chloride	Oral LD50: Rat 1,600 mg/kg Inhalation LC50: Rat 76,000 mg/m <sup>3</sup> /4 h Inhalation LC50: Rat 53 mg/l /6 h
Aromatic polyisocyanate	Oral LD50: Rat 49 g/kg Dermal LD50: Rabbit > 9,400 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 11 mg/l / GHS LC50 (dust and mist): Acute toxicity point estimate 1.5 mg/l /
4,4'-Diphenylmethane diisocyanate	Oral LD50: Rat 9,200 mg/kg Oral LD50: Rat 31,600 mg/kg Dermal LD50: rabbit > 5,000 mg/kg GHS LC50 (vapour): Acute toxicity point estimate 11 mg/l /4 h GHS LC50 (dust and mist): Acute toxicity point estimate 1.5 mg/l /4 h Inhalation LC50: Rat 369 mg/m <sup>3</sup> /4 h
1,2-Butylene oxide	Oral LD50: Rat 500 mg/kg Dermal LD50: Rabbit 1,757 mg/kg Inhalation LC50: Rat 6,300 mg/m <sup>3</sup> /4 h
2,4-Diphenylmethane diisocyanate	N.D.

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

**Carcinogenicity:** Category 1A - May cause cancer.

Components contributing to classification: Trichloroethylene. Methylene chloride. 4,4'-Diphenylmethane diisocyanate. 1,2-Butylene oxide. 2,4-Diphenylmethane diisocyanate.

**Reproductive toxicity:** Category 1B - May damage fertility or the unborn child.

Components contributing to classification: Trichloroethylene. 1,2-Butylene oxide.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICITY:**

Chemical Name	Ecotoxicity
Trichloroethylene	<p><u>Fish:</u> Pimephales promelas 31.4 - 71.8 mg/196 h flow-through                      Lepomis macrochirus 39 - 54 mg/196 h Static  <u>Invertebrates:</u> Daphnia magna 2.2 mg/148 h  <u>Plants:</u> Desmodesmus subspicatus 450 mg/196 h                      Pseudokirchneriella subcapitata 175 mg/196 h</p>
Methylene chloride	<p><u>Fish:</u> Pimephales promelas 140.8 - 277.8 mg/196 h flow-through                      Pimephales promelas 262 - 855 mg/196 h Static                      Lepomis macrochirus 193 mg/196 h Static                      Lepomis macrochirus 193 mg/196 h flow-through  <u>Invertebrates:</u> Daphnia magna 1,532 - 1,847 mg/148 h Static                      Daphnia magna 190 mg/148 h  <u>Plants:</u> Pseudokirchneriella subcapitata &gt; 500 mg/196 h                      Pseudokirchneriella subcapitata &gt; 500 mg/172 h</p>
Aromatic polyisocyanate	N.D.
4,4'-Diphenylmethane diisocyanate	<p><u>Fish:</u> Species &gt; 1,000 mg/196 h  <u>Invertebrates:</u> Daphnia magna &gt; 1,000 mg/148 h</p>
1,2-Butylene oxide	<p><u>Invertebrates:</u> Daphnia magna 69.8 mg/148 h  <u>Plants:</u> Desmodesmus subspicatus &gt; 500 mg/172 h</p>
2,4-Diphenylmethane diisocyanate	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:** Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality. 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

This product is NOT REGULATED for non-bulk US DOT Road, IATA Cargo or IMDG shipments. For the most accurate shipping information, refer to your transportation/compliance department regarding changes in package size, mode of shipment or other regulatory descriptors.

## 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.:

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Weight % Less Than</u>
Trichloroethylene	79-01-6	55.0 %
Methylene chloride	75-09-2	40.0 %
Aromatic polyisocyanate	PROPRIETARY	5.0 %
4,4'-Diphenylmethane diisocyanate	101-68-8	5.0 %
1,2-Butylene oxide	106-88-7	1.0 %
2,4-Diphenylmethane diisocyanate	5873-54-1	1.0 %

**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

<b>16. OTHER INFORMATION</b>
------------------------------

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: 1 PHYSICAL HAZARD: 1**

\* - Indicates a chronic hazard; see Section 2

**Revision:** New GHS SDS Format

**Effective Date:** 04/28/2015

<b>DISCLAIMER</b>
-------------------

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.