



GHS SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **TYRITE 7411**
Product Use/Class: **ADHESIVE**

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EFFECTIVE DATE: 07/23/2014

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

All components of this product have either not been classified according to GHS or are below the threshold concentration required for classification. Please refer to section 2-Other Hazards for possible hazards associated with this product.

Hazard Statements

Refer to Section 2; Other Hazards.

Precautionary Statements

Prevention

Refer to Section 6 of this SDS.

Response

Refer to Section 4 of this SDS.

Storage

Refer to Section 7 of this SDS.

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: 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. Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.

Chronic: May cause long-term lung damage. Prolonged or repeated contact may result in dermatitis.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight % Less Than
Isocyanate	PROPRIETARY	10.0 %
Polymeric isocyanate	PROPRIETARY	5.0 %
Triethyl phosphate	78-40-0	5.0 %
Diphenylmethane diisocyanate	26447-40-5	0.9 %

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: High volume water jet

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion. Keep containers tightly closed. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool.

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

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: 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,

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refer to hazard caution information in other sections of the MSDS form. Scoop spilled material into an appropriate container for proper disposal. (If necessary, use inert absorbent material to aid in containing the spill).

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. Use with adequate ventilation.

STORAGE: Store only in well-ventilated areas. Keep container closed when not in use.

INCOMPATIBILITY: Strong oxidizers, acids, bases, water. Amines, acids, water, hydroxyl, or active hydrogen compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

<u>Chemical Name</u>	<u>ACGIH TLV-TWA</u>	<u>ACGIH TLV-STEL</u>	<u>OSHA PEL-TWA</u>	<u>OSHA PEL-CEILING</u>	<u>Skin</u>
Isocyanate	0.005 ppm	N.E.	N.E.	0.2 mg/m ³ 0.02 ppm	N.A.
Polymeric isocyanate	N.E.	N.E.	N.E.	N.E.	N.A.
Triethyl phosphate	N.E.	N.E.	N.E.	N.E.	N.A.
Diphenylmethane diisocyanate	N.E.	N.E.	N.E.	0.2 mg/m ³ 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.

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. Observe OSHA regulations (29CFR 1910.134) for respirator use.

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. Use long-sleeved shirt to minimize skin exposure.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. 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:

VAPOR PRESSURE: N.D.

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APPEARANCE:	light blue	VAPOR DENSITY:	Heavier than Air
PHYSICAL STATE:	Paste	LOWER EXPLOSIVE LIMIT:	1.7 %(V)
FLASH POINT:	201 °F, 94 °C	UPPER EXPLOSIVE LIMIT:	10 %(V)
BOILING RANGE:	N.A.	EVAPORATION RATE:	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	DENSITY:	1.2 g/cm ³
DECOMPOSITION TEMPERATURE:	N.D.	VISCOSITY, DYNAMIC:	≥1,000 mPa.s @
ODOR THRESHOLD:	N.D.	VISCOSITY, KINEMATIC:	≥833 mm ² /s @ 25 °C
SOLUBILITY IN H₂O:		VOLATILE BY WEIGHT:	0.00 %
pH:	N.A.	VOLATILE BY VOLUME:	0.00 %
FREEZE POINT:	N.D.	VOC CALCULATED:	0 lb/gal, 0 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.

INCOMPATIBILITY: Strong oxidizers, acids, bases, water.; Amines, acids, water, hydroxyl, or active hydrogen compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Monomeric isocyanate, traces of hydrogen cyanide, nitrogen dioxide, 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
Isocyanate	Oral LD50: Rat 9,200 mg/kg Inhalation LC50: Rat 369 mg/m ³ /4 h
Polymeric isocyanate	N.D.
Triethyl phosphate	Oral LD50: Rat 1,165 mg/kg Oral LD50: Rat 1,100 - 1,600 mg/kg
Diphenylmethane diisocyanate	Oral LD50: Rat > 7,400 mg/kg Dermal LD50: Rabbit > 6,200 mg/kg Inhalation LC50: Rat 0.369 mg/l /4 h

12. ECOLOGICAL INFORMATION

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ECOTOXICITY:

Chemical Name	Ecotoxicity
Isocyanate	N.D.
Polymeric isocyanate	N.D.
Triethyl phosphate	N.D.
Diphenylmethane diisocyanate	<u>Invertebrates:</u> Daphnia magna > 1,000 mg/124 h <u>Plants:</u> Skeletonema costatum 3,230 mg/196 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

This product is NOT REGULATED for non-bulk 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 for your country or particular locality.

15. REGULATORY INFORMATION

INVENTORIES

Australia Inventory of Existing Chemical Substances (AICS)	YES
Chinese Inventory of Existing Chemical Substances (IECSC)	YES
Japan Existing and New Chemical Substances (ENCS)	YES
Korean Inventory of Existing and Evaluated Chemical Substances (KECI)	YES
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	YES
US Toxic Substances Control Act (TSCA)	YES

16. OTHER INFORMATION

HMIS RATINGS - HEALTH: FLAMMABILITY: PHYSICAL HAZARD:

* - Indicates a chronic hazard; see Section 3

Revision: Section 1

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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.