



# Material Safety Data Sheet

NFPA	WHMIS	PPE	Transport Symbol

Preparation Date 19-Dec-2006

Revision Date 08-Sep-2009

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** White-Knight™ Plus  
**Product Code** 7828  
**UN-No** 1263

**Contact Manufacturer**

The Garland Company, Inc.  
 3800 East 91st. Street  
 Cleveland, Ohio 44105-2197  
 Ph: (800) 762-8225 Fax: (216) 641-0633

Garland Canada, Inc.  
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 Ph: (416)747-7995 Fax: (416)747-1980

**Emergency Telephone Number** 07973 837 713

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Harmful by inhalation, in contact with skin and if swallowed

**Appearance** White.

**Physical State** Liquid.

**Odor** Petroleum distillates.

**Mexico - Grade**

Moderate risk, Grade 2

### Potential Health Effects

**Principle Routes of Exposure**

Inhalation, Eye contact, Skin contact.

### **Acute Effects**

**Eyes**

Contact with eyes may cause irritation.

**Skin**

May cause eye/skin irritation. May cause sensitization by skin contact.

<b>Inhalation</b>	Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Inhalation of vapours in high concentration may cause irritation of respiratory system.
<b>Ingestion</b>	Harmful if swallowed.
<b>Chronic Effects</b>	Prolonged exposure may cause chronic effects.
See Section 11 for additional Toxicological information.	
<b>Aggravated Medical Conditions</b>	Not available
<b>Interactions with Other Chemicals</b>	Not available
<b>Potential Environmental Effects</b>	See Section 12 for additional Ecological information.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Hazardous Components

Chemical Name	CAS-No	Weight %	North American Hazard Indicator
Ethyl Benzene	100-41-4	1 - 5	1
Xylene	1330-20-7	1 - 5	1
Isophoronediiisocyanate	4098-71-9	10 - 30	1

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Move to fresh air.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Do not induce vomiting. Call a physician or Poison Control Centre immediately.
<b>Notes to Physician</b>	Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Foam. Dry chemical. Dry powder. Carbon dioxide (CO2).
<b>Unsuitable Extinguishing Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Hazardous Combustion Products</b>	Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons.
<b>Explosion Data</b>	
Sensitivity to mechanical impact	No
Sensitivity to static discharge	Yes

**Specific Hazards Arising from the Chemical**

Combustible material. Keep product and empty container away from heat and sources of ignition.

**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

**NFPA****Health 2****Flammability 2****Instability 1****6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment.
<b>Environmental Precautions</b>	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Keep out of waterways.
<b>Methods for Containment</b>	Contain with inert absorbant material
<b>Methods for Cleaning Up</b>	Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.
<b>Other Information</b>	Not applicable

**7. HANDLING AND STORAGE**

<b>Handling</b>	Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Remove all sources of ignition.
<b>Storage</b>	Keep away from open flames, hot surfaces and sources of ignition. Keep tightly closed in a dry and cool place. Keep out of the reach of children.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	Ontario TWAEV	Mexico
Ethyl Benzene	TWA: 100 ppm STEL: 125 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	STEL: 540 mg/m <sup>3</sup> STEL: 125 ppm TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	STEL: 125 ppm STEL: 545 mg/m <sup>3</sup> TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>
Xylene	TWA: 100 ppm STEL: 150 ppm	TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	STEL: 650 mg/m <sup>3</sup> STEL: 150 ppm TWA: 100 ppm TWA: 435 mg/m <sup>3</sup>	STEL: 150 ppm STEL: 655 mg/m <sup>3</sup> TWA: 435 mg/m <sup>3</sup> TWA: 100 ppm
Isophoronediiisocyanate	TWA: 0.005 ppm		CEV: 0.8 µmol/m <sup>3</sup> CEV: 0.02 ppm TWA: 0.2 µmol/m <sup>3</sup> TWA: 0.005 ppm	TWA: 0.01 ppm TWA: 0.09 mg/m <sup>3</sup>

Chemical Name	NIOSH IDLH
Ethyl Benzene	800 ppm

<b>Engineering Measures</b>	Do not allow ventilation equipment to draw material odors indoors..
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**Personal Protective Equipment**

<b>Eye/face Protection</b>	Safety glasses with side-shields.
<b>Skin Protection</b>	Long sleeved clothing. Impervious gloves.
<b>Respiratory Protection</b>	In case of insufficient ventilation wear suitable respiratory equipment.

**Hygiene Measures**

Wash hands before breaks and at the end of workday. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White	
<b>Odor</b>	Petroleum distillates	
<b>Physical State</b>	Liquid	
<b>pH</b>	Not available	
<b>Flash Point</b>	109°F / 41°C	
<b>Autoignition Temperature</b>	Not available	
<b>Boiling Point/Range</b>	308 -490°F	
<b>Freezing Point</b>	Not available	
<b>Flammability Limits in Air</b>	<b>Lower</b> 0.7	<b>Upper</b> 10.7
<b>Explosive Properties</b>	Not available	
<b>Oxidizing Properties</b>	Not available	
<b>Evaporation Rate</b>	.100 (ether = 1)	
<b>Vapor Pressure</b>	2.0 @ 20 C mmHg @ °F	
<b>Vapor Density</b>	7.0	
<b>Specific Gravity</b>	1.13	
<b>Density</b>	9.44	
<b>Water Solubility</b>	Not available	
<b>Volatiles</b>	16 (%WT)	
<b>VOC Content</b>	163 g/L	

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid</b>	Heat, flames and sparks.
<b>Incompatible Materials</b>	Strong oxidizing agents. Water. Amines. Bases. Alcohols.
<b>Hazardous Decomposition Products</b>	Organic materials. Carbon dioxide (CO <sub>2</sub> ). Carbon monoxide. Hydrocarbons. Nitrogen oxides (NO <sub>x</sub> ).
<b>Possibility of Hazardous Reactions</b>	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity****Component Information**

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Ethyl Benzene	3500 mg/kg Rat	15354 mg/kg Rabbit	17.2 mg/L Rat 4 h

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Di-n-butylamine	189 mg/kg Rat	1010 µL/kg Rabbit	
Xylene	4300 mg/kg Rat	1700 mg/kg Rabbit	5000 ppm Rat 4 h
Isophoronediiisocyanate	1270 mg/kg Rat	4780 mg/kg Rabbit	0.123 mg/L Rat 4 h 0.26 mg/L Rat 1 h

**Chronic Toxicity****Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA	Mexico
Ethyl Benzene	A3	Group 2B		X	

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

No information available.

Ethyl Benzene**Freshwater Algae Data**

*Selenastrum capricornutum* EC50=4.6 mg/L (72 h)

*Selenastrum capricornutum* EC50>438 mg/L (96 h)

**Microtox Data**

*Photobacterium phosphoreum* EC50=9.68 mg/L (30 min)

*Nitrosomonas* EC50=96 mg/L (24 h)

**Water Flea Data**

*Daphnia magna* EC501.8 - 2.4 mg/L (48 h)

Di-n-butylamine**Freshwater Algae Data**

*Scenedesmus subspicatus* EC50=1.1 mg/L (96 h)

*Scenedesmus subspicatus* EC50=16.4 mg/L (72 h)

*Selenastrum capricornutum* EC50=19 mg/L (96 h)

**Microtox Data**

*Pseudomonas putida* EC50=196 mg/L (17 h)

**Water Flea Data**

water flea EC50=66 mg/L (48 h)

Xylene**Microtox Data**

*Photobacterium phosphoreum* EC50=0.0084 mg/L (24 h)

**Water Flea Data**

*Gammarus lacustris* LC50=0.6 mg/L (48 h)

water flea EC50=3.82 mg/L (48 h)

Isophoronediiisocyanate**Freshwater Algae Data**

*Scenedesmus subspicatus* EC50=118.7 mg/L (72 h)

**Water Flea Data**

*Daphnia magna* EC50=83.7 mg/L (24 h)

<b>Persistence/Degradability</b>	Not available
<b>Bioaccumulation/ Accumulation</b>	Not available
<b>Mobility in Environmental Media</b>	Not available

Ethyl Benzene**log Pow** = 3.118Di-n-butylamine**log Pow** = 2.06Xylene**log Pow** = 2.77 - 3.15

### 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of in accordance with local regulations.
<b>Contaminated Packaging</b>	Empty containers should be taken for local recycling, recovery or waste disposal.
<b>US EPA Waste Number</b>	D001

### 14. TRANSPORT INFORMATION

**DOT** Not Regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO**

<b>UN-No</b>	UN1263
<b>Proper Shipping Name</b>	Paint
<b>Hazard Class</b>	3
<b>Subsidiary Class</b>	

## 14. TRANSPORT INFORMATION

**Packing Group** III  
**Description** Paint, UN1263, PG III

### IATA

**UN-No** UN1263  
**Proper Shipping Name** Paint  
**Hazard Class** 3  
**Subsidiary Class**  
**Packing Group** III  
**ERG Code** 3L  
**Description** Paint, UN1263, PG III

### IMDG/IMO

**Proper Shipping Name** Paint  
**Hazard Class** 3  
**Subsidiary Class**  
**UN-No** UN1263  
**Packing Group** III  
**EmS No.** F-E, \_S-E\_  
**Description** Paint, UN1263, PG III

## 15. REGULATORY INFORMATION

### International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	CHINA	KECL	PICCS	AICS
Ethyl Benzene	X	X	-	X	-	X	X	X	X	X
Di-n-butylamine	X	X	-	X	-	X	X	X	X	X
Xylene	X	X	-	X	-	X	X	X	X	X
Isophoronediiisocyanate	X	X	-	X	-	X	X	X	X	X
Poly (oxy-1,4-butanediyl)-a-hydro-w-hydroxy	X	X	-	-	-	X	X	X	X	X

**TSCA** Complies  
**DSL** Complies  
**NDSL** Complies  
**EINECS** Does not Comply  
**ELINCS** Does not Comply  
**ENCS** Does not Comply  
**CHINA** Complies  
**KECL** Complies  
**PICCS** Complies  
**AICS** Complies

### USA

### Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

Chemical Name	SARA 313 - Threshold Values
Ethyl Benzene (CAS #: 100-41-4)	0.1%
Xylene (CAS #: 1330-20-7)	1.0%
Isophoronediiisocyanate (CAS #: 4098-71-9)	1.0

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**

This product does not contain any HAPs.

**Chemical Name**

Ethyl Benzene (CAS #: 100-41-4)

Xylene (CAS #: 1330-20-7)

**State Regulations****California Proposition 65**

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Chemical Name	CAS-No	Category	Type
Ethyl Benzene	100-41-4	Carcinogen	

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Ethyl Benzene	X	X	X	X	X
Di-n-butylamine	X	X	X		X
Xylene	X	X	X	X	X
Isophoronediiisocyanate	X	X	X	X	X

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

B3 Combustible liquid

D2A Very toxic materials

Chemical Name	NPRI
Isophoronediiisocyanate	X

## 16. OTHER INFORMATION

Preparation Date 19-Dec-2006

Revision Date 08-Sep-2009

Revision Summary Not available



Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**