1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: White-Knight™ FR Base Coat
Product Code: 7833
UN-No: UN1263
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.
209 Carrier Dr.
Toronto, Ontario M9W 5Y8
Ph: (416)747-7995 (800)387-5991 Fax: (416)747-1980

Emergency Telephone Number: 1-800-762-8225 (24 Hrs.)
2. HAZARDS IDENTIFICATION

Emergency Overview
Harmful by inhalation, in contact with skin and if swallowed

Appearance - Gray  
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.

Inhalation  
Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Inhalation of vapors in high concentration may cause irritation of respiratory system.

Ingestion  
Harmful if swallowed.

Chronic Effects  
Prolonged exposure may cause chronic effects.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions  
Not available

Interactions with Other Chemicals  
Not available

Potential Environmental Effects  
See Section 12 for additional Ecological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether acetate</td>
<td>108-65-6</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>471-34-1</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Tris(1-chloro-2-propyl)phosphate</td>
<td>13674-84-5</td>
<td>5 - 10</td>
</tr>
<tr>
<td>Toluene-2,4-disocyanate</td>
<td>584-84-9</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Toluene 2,6-disocyanate</td>
<td>91-08-7</td>
<td>0.1 - 1</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>8052-41-3</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Eye Contact  
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.

Inhalation: Move to fresh air.

Ingestion: Do not induce vomiting without medical advice. Do not induce vomiting. Call a physician or Poison Control Center immediately.

Notes to Physician: Treat symptomatically

5. FIRE-FIGHTING MEASURES


Unsuitable Extinguishing Media: Do not use a solid water stream as it may scatter and spread fire.

Hazardous Combustion Products: Carbon monoxide, Carbon dioxide (CO2), Hydrocarbons.

Explosion Data:
- 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

Personal Precautions: Evacuate personnel to safe areas. Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment.

Environmental Precautions: Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Keep out of waterways.

Methods for Containment: Dam up Dike with inert absorbent material

Methods for Cleaning Up: Soak up with inert absorbent material. Sweep up and shovel into suitable containers for disposal.

Other Information: Not applicable
7. HANDLING AND STORAGE

Handling
Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Remove all sources of ignition.

Storage
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>Ontario TWAEV</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether acetate</td>
<td></td>
<td></td>
<td>TWA: 50 ppm</td>
<td>TWA: 270 mg/m³</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>TWA: 10 mg/m³</td>
<td></td>
<td>TWA: 10 mg/m³</td>
<td></td>
</tr>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td>TWA: 0.005 ppm</td>
<td>STEL: 0.02 ppm</td>
<td>Ceiling: 0.02 ppm</td>
<td>Ceiling: 0.14 mg/m³</td>
</tr>
<tr>
<td>Toluene 2,6-diisocyanate</td>
<td>TWA: 0.005 ppm</td>
<td>STEL: 0.02 ppm</td>
<td></td>
<td>TWA: 0.14 mg/m³</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>TWA: 100 ppm</td>
<td>TWA: 2900 mg/m³</td>
<td>TWA: 500 ppm</td>
<td>TWA: 525 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA: 523 mg/m³</td>
<td>STEL: 200 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TWA: 1050 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TWA: 523 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>TWA: 100 ppm</td>
</tr>
</tbody>
</table>

IDLH: Immediately Dangerous to Life or Health

Engineering Measures
Do not allow ventilation equipment to draw material odors indoors.

Personal Protective Equipment

Eye/face Protection  Safety glasses with side-shields.
Skin Protection     Long sleeved clothing. Impervious gloves.
Respiratory Protection 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

Appearance  Gray
Odor        Petroleum distillates
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>117°F / 47°C</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>Not available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>Not available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Lower: 1.7</td>
</tr>
<tr>
<td></td>
<td>Upper: 7.0</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Not available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>&gt;1.0 (ether = 1)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>&gt;1.0</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>11.4 lb/gal</td>
</tr>
<tr>
<td>Density</td>
<td>1.4 g/L</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Not available</td>
</tr>
<tr>
<td>Volatiles</td>
<td>17.0 (%WT)</td>
</tr>
<tr>
<td>VOC Content</td>
<td>287 g/L</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stability</td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td>Conditions to Avoid</td>
<td>Open flames and intense heat.</td>
</tr>
<tr>
<td>Products</td>
<td>Nitrogen oxides (NOx).</td>
</tr>
<tr>
<td>Possibility of Hazardous</td>
<td>None under normal processing</td>
</tr>
<tr>
<td>Reactions</td>
<td></td>
</tr>
</tbody>
</table>

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information 000

Component Information

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl</td>
<td>8532 mg/kg Rat</td>
<td>5000 mg/kg Rabbit</td>
<td></td>
</tr>
<tr>
<td>ether acetate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>6450 mg/kg Rat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tris(1-chloro-2-propyl)phosphate</td>
<td>500 mg/kg Rat</td>
<td>1230 mg/kg Rabbit</td>
<td>5 mg/L Rat 4 h</td>
</tr>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td>5800 mg/kg Rat</td>
<td>16 mL/kg Rabbit</td>
<td>14 ppm Rat 4 h</td>
</tr>
</tbody>
</table>
Chronic Toxicity

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td></td>
<td>Group 2B</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Toluene 2,6-diisocyanate</td>
<td></td>
<td>Group 2B</td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicity
No information available.

Propylene glycol monomethyl ether acetate

**Water Flea Data**
Daphnia magna EC50>500 mg/L (48 h)

Tris(1-chloro-2-propyl)phosphate

**Freshwater Algae Data**
Selenastrum capricornutum EC50=4 mg/L (96 h)
Scenedesmus subspicatus EC50=45 mg/L (72 h)

**Microtox Data**
Photobacterium phosphoreum EC50=295 mg/L (30 min)

**Water Flea Data**
Daphnia magna EC50=63 mg/L (48 h)

Persistence/Degradability Not available

Bioaccumulation/ Accumulation Not available

Mobility in Environmental Media Not available

Propylene glycol monomethyl ether acetate

log Pow = 0.43

Tris(1-chloro-2-propyl)phosphate

log Pow = 2.59

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Dispose of in accordance with local, state, and federal regulations.
Contaminated Packaging | Empty containers should be taken for local recycling, recovery or waste disposal.
US EPA Waste Number | D001

### 14. TRANSPORT INFORMATION

**DOT**
- **UN-No**: Not Regulated
- **UN1263**

**Special Provisions**
- Not Regulated for non-bulk packaging of 450 liters (119 gallons) or less (DOT 49 CFR 173.150(f))

**Description**
- Combustible Liquid, n.o.s.

**TDG**
- Non-regulated for surface transportation (no hazard label required for surface transportation via motor freight).

**Subsidiary Class**

**Special Provisions**
- Not Regulated for non-bulk packaging of 450 liters (119 gallons) or less (DOT 49 CFR 173.150(f))

**Description**
- Combustible liquid, n.o.s.

**MEX**
- Not regulated

**ICAO**
- **UN-No**: UN1263
- **Proper Shipping Name**: Paint
- **Hazard Class**: 3
- **Packing Group**: III
- **Description**: UN 1263, Paint, Class 3, PG III, Flammable Liquid

**IATA**
- **UN-No**: UN1263
- **Proper Shipping Name**: Paint
- **Hazard Class**: 3
- **Packing Group**: III
- **ERG Code**: 128
- **Description**: UN 1263, Paint, Class 3, PG III, Flammable Liquid

**IMDG/IMO**
- **UN-No**: UN1263
- **Proper Shipping Name**: Paint
- **Hazard Class**: 3
- **Packing Group**: III
- **Description**: UN 1263, Paint, Class 3, PG III, Flammable Liquid
15. REGULATORY INFORMATION

International Inventories

All of the components in the product are on the following Inventory lists: No information available, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (ECL), China (IECSC), Japan (ENCS), Philippines (PICCS).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>CHINA</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propylene glycol monomethyl ether acetate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tris(1-chloro-2-propyl)phosphate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Toluene 2,6-diisocyanate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

TSCA Complies
DSL Complies
NDSL Complies
EINECS Complies
ELINCS Complies
ENCS Complies
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 Title 40n of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene-2,4-diisocyanate (CAS #: 584-84-9)</td>
<td>0.1%</td>
</tr>
<tr>
<td>Toluene 2,6-diisocyanate (CAS #: 91-08-7)</td>
<td>0.1%</td>
</tr>
</tbody>
</table>

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product contains the following HAPs:

Chemical Name
Toluene-2,4-diisocyanate (CAS #: 584-84-9)
State Regulations

California Proposition 65
WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Toluene 2,6-diisocyanate</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stoddard solvent</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toluene-2,4-diisocyanate</td>
<td>X</td>
</tr>
<tr>
<td>Toluene 2,6-diisocyanate</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend
NPRI - National Pollutant Release Inventory

16. OTHER INFORMATION

Preparation Date
19-Dec-2006

Revision Date
11-Jun-2012

Revision Summary
Transportation update

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