



since 1895

Material Safety Data Sheet

| NFPA | WHMIS | PPE | Transport Symbol |
|------|-------|-----|------------------|
| | | | |

Preparation Date 19-Dec-2006

Revision Date 18-Aug-2011

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name White-Knight™ Plus Base Coat
Product Code 7837
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.
 1296 Martin Grove Rd.
 Toronto, Ontario M9W 4X3
 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 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

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

| | |
|---------------------------|---|
| 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

| | |
|---|--|
| Suitable Extinguishing Media | Foam. Dry chemical. Dry powder. Carbon dioxide (CO ₂). |
| Unsuitable Extinguishing Media | Do not use a solid water stream as it may scatter and spread fire. |
| Hazardous Combustion Products | Carbon monoxide, Carbon dioxide (CO ₂), 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 | Contain 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

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

| Chemical Name | NIOSH IDLH |
|---------------|------------|
| Ethyl Benzene | 800 ppm |

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

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under recommended storage conditions. |
| Conditions to Avoid | Open flames and intense heat. |
| Incompatible Materials | Strong oxidizing agents. Water. Amines. Bases. Alcohols. |
| Hazardous Decomposition Products | Organic materials. Carbon dioxide (CO ₂). Carbon monoxide. Hydrocarbons. Nitrogen oxides (NO _x). |
| Possibility of Hazardous Reactions | 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 |
| 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 EC50=1.8 - 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)

Persistence/Degradability

Not available

Bioaccumulation/ Accumulation

Not available

Mobility in Environmental Media

Not available

Ethyl Benzene

log Pow = 3.118

Di-n-butylamine

log Pow = 2.06

Xylene

Ethyl Benzene

log Pow = 2.77 - 3.15

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 | Not Regulated |
| UN-No | 1263 |
| TDG | Not regulated |
| MEX | Not regulated |
| ICAO | |
| UN-No | UN1263 |
| Proper Shipping Name | Paint |
| Hazard Class | 3 |
| Packing Group | III |
| Description | Paint,UN1263,PG III |
| IATA | |
| UN-No | UN1263 |
| Proper Shipping Name | Paint |
| Hazard Class | 3 |
| Packing Group | III |
| ERG Code | 3L |
| Description | Paint,UN1263,PG III |
| IMDG/IMO | |
| Proper Shipping Name | Paint |
| Hazard Class | 3 |
| 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 |

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | CHINA | KECL | PICCS | AICS |
|---|------|-----|------|--------|--------|------|-------|------|-------|------|
| 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 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 18-Aug-2011

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