






since 1895

# Material Safety Data Sheet

NFPA	WHMIS	PPE	Transport Symbol
			Not regulated, non-bulk

Preparation Date 19-Dec-2006

Revision Date 25-May-2011

Revision Number 4

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** White-Star  
**Product Code** 7840  
**UN-No** Not available

**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** 1-800-762-8225 (24 Hrs.)

## 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 vapors 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
Isophoronediiisocyanate	4098-71-9	1 - 5	1
Petroleum naphtha, light aromatic	64742-95-6	5 - 10	1

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.
<b>Skin Contact</b>	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Remove and wash contaminated clothing before re-use.
<b>Inhalation</b>	Move to fresh air. If breathing is difficult, give oxygen.
<b>Ingestion</b>	Call a physician or Poison Control Center immediately. Get medical attention immediately. Do not induce vomiting unless advised by a physician.
<b>Notes to Physician</b>	Treat symptomatically

### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Foam. Dry chemical. Carbon dioxide (CO <sub>2</sub> ). Water.
<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 (CO <sub>2</sub> ), Hydrocarbons.
<b>Explosion Data</b>	
<b>Sensitivity to mechanical impact</b>	No
<b>Sensitivity to static discharge</b>	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 absorbent 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
Isophoronediiisocyanate	TWA: 0.005 ppm		CEV: 0.8 $\mu\text{mol}/\text{m}^3$ CEV: 0.02 ppm TWA: 0.2 $\mu\text{mol}/\text{m}^3$ TWA: 0.005 ppm	TWA: 0.01 ppm TWA: 0.09 $\text{mg}/\text{m}^3$

**IDLH:** Immediately Dangerous to Life or Health

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

**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>	108°F / 42°C	
<b>Autoignition Temperature</b>	Not available	
<b>Boiling Point/Range</b>	325°F / 163°C	
<b>Freezing Point</b>	Not available	
<b>Flammability Limits in Air</b>	<b>Lower</b> 1.0	<b>Upper</b> 7.0
<b>Explosive Properties</b>	Not available	
<b>Oxidizing Properties</b>	Not available	
<b>Evaporation Rate</b>	<1.0 (ether = 1)	
<b>Vapor Pressure</b>	2.0 @ 20 C mmHg @ °F	
<b>Vapor Density</b>	Not available	
<b>Specific Gravity</b>	1.20-1.25	
<b>Density</b>	10.01-10.43	
<b>Water Solubility</b>	Reacts with water	
<b>Volatiles</b>	Not available	
<b>VOC Content</b>	130 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

**LD50 Oral:**                      **LD50 Oral:000**

### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Isophoronediiisocyanate	1270 mg/kg Rat	4780 mg/kg Rabbit	0.123 mg/L Rat 4 h 0.26 mg/L Rat 1 h
Petroleum naphtha, light aromatic	8400 mg/kg Rat	2000 mg/kg Rabbit	3400 ppm Rat 4 h 5.2 mg/L Rat 4 h

### Chronic Toxicity

#### **Carcinogenicity**

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

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No information available.

#### 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)

#### Petroleum naphtha, light aromatic

##### **Water Flea Data**

*Daphnia magna* EC50=6.14 mg/L (48 h)

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

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Disposal Method</b>	Dispose of in accordance with local, state, and federal 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

<b><u>DOT</u></b>	Not regulated, non-bulk
<b>Special Provisions</b>	Not Regulated for non-bulk packaging of 450 liters (119 gallons) or less (DOT 49 CFR 173.150(f))
<b>Description</b>	UN 1263, Paint, Class 3,PG III, Flammable Liquid
<b><u>TDG</u></b>	
<b>Special Provisions</b>	Not Regulated for non-bulk packaging of 450 liters (119 gallons) or less (DOT 49 CFR 173.150(f))
<b>Description</b>	UN 1263, Paint, Class 3,PG III, Flammable Liquid
<b><u>MEX</u></b>	Not regulated
<b><u>ICAO</u></b>	
<b>UN-No</b>	1263
<b>Proper Shipping Name</b>	Paint
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN 1263, Paint, Class 3,PG III, Flammable Liquid

<b>14. TRANSPORT INFORMATION</b>
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**IATA**

<b>UN-No</b>	1263
<b>Proper Shipping Name</b>	Paint
<b>Hazard Class</b>	3
<b>Packing Group</b>	III
<b>Description</b>	UN 1263, Paint, Class 3 ,PG III, Flammable Liquid

**IMDG/IMO**

<b>Proper Shipping Name</b>	Paint
<b>Hazard Class</b>	3
<b>UN-No</b>	1263
<b>Packing Group</b>	III
<b>Description</b>	UN 1263, Paint, Class 3, PG III, Flammable Liquid

<b>15. REGULATORY INFORMATION</b>
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**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).

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	CHINA	KECL	PICCS	AICS
Isophoronediiisocyanate	X	X	-	X	-	X	X	X	X	X
Petroleum naphtha, light aromatic	X	X	-	X	-	-	X	X	X	X

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>NDSL</b>	Complies
<b>EINECS</b>	Complies
<b>ELINCS</b>	Does not Comply
<b>ENCS</b>	Complies
<b>CHINA</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	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
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.

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

This product contains the following Proposition 65 chemicals:

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
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

**Legend**

NPRI - National Pollutant Release Inventory

<b>16. OTHER INFORMATION</b>
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<b>Preparation Date</b>	19-Dec-2006
<b>Revision Date</b>	25-May-2011
<b>Revision Summary</b>	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**