
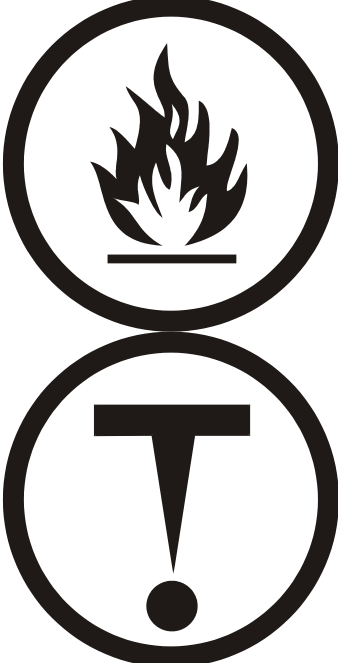





Material Safety Data Sheet

| NFPA | WHMIS | PPE | Transport Symbol |
|---|--|--|----------------------|
|  |  |  | <p>Not regulated</p> |

Preparation Date 08-Dec-2006

Revision Date 18-Jan-2011

Revision Number 3

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Gravitop Asphalt
Product Code 7721
UN-No 1999

Contact Manufacturer

The Garland Company, Inc.
 3800 East 91st. Street
 Cleveland, Ohio 44105-2197
 Ph: (216) 641-7500 Fax: (216) 641-0633
<http://www.garlandco.com>

Garland Canda, 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 | | |
|---------------------------|-------------------------------|------------------------------------|
| Appearance Black. | Physical State Liquid. | Odor Petroleum distillates. |
| Combustible material | | |

Mexico - Grade Slight risk, Grade 1

Potential Health Effects

Principle Routes of Exposure Skin contact, Eye contact, Inhalation.

Acute Effects

Eyes

Avoid contact with eyes. Moderately irritating to the eyes.

Skin

Avoid contact with skin. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact.

Inhalation

Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Ingestion

Harmful if swallowed. Ingestion may cause irritation to mucous membranes.

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

Chronic Effects

Prolonged exposure may cause chronic effects. Repeated contact may cause allergic reactions in very susceptible persons.

See Section 11 for additional Toxicological information.

Main Symptoms

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Aggravated Medical Conditions

Liver disorders. Kidney disorders. Skin disorders. Central nervous system.

Interactions with Other Chemicals

No information available.

Potential Environmental Effects

See Section 12 for additional Ecological information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

| Chemical Name | CAS-No | Weight % |
|-----------------------------|------------|----------|
| Stoddard solvent | 8052-41-3 | 5 - 10 |
| Petroleum Asphalt | 8052-42-4 | 10 - 30 |
| Asphalt | 8052-42-4 | 1 - 5 |
| Calcium Carbonate | 1317-65-3 | 5 - 10 |
| Magnesium Carbonate | 546-93-0 | 1 - 5 |
| Hydrous Alumino Silicate | 12174-11-7 | 5 - 10 |
| Quartz (Crystalline Silica) | 14808-60-7 | 0.1 - 1 |

4. FIRST AID MEASURES

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

7. HANDLING AND STORAGE

| | |
|-----------------|--|
| Handling | Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of ignition. Ensure adequate ventilation. |
| Storage | Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | Ontario TWAEV | Mexico |
|-----------------------------|------------------------------|---|-----------------------------|---|
| Stoddard solvent | TWA: 100 ppm | TWA: 2900 mg/m ³ TWA: 500 ppm | TWA: 525 mg/m ³ | STEL: 200 ppm STEL: 1050 mg/m ³ TWA: 523 mg/m ³ TWA: 100 ppm |
| Petroleum Asphalt | TWA: 0.5 mg/m ³ | | TWA: 0.5 mg/m ³ | STEL: 10 mg/m ³ TWA: 5 mg/m ³ |
| Asphalt | TWA: 0.5 mg/m ³ | | TWA: 0.5 mg/m ³ | STEL: 10 mg/m ³ TWA: 5 mg/m ³ |
| Calcium Carbonate | | TWA: 15 mg/m ³ TWA: 5 mg/m ³ | TWA: 10 mg/m ³ | STEL: 20 mg/m ³ TWA: 10 mg/m ³ |
| Magnesium Carbonate | | TWA: 15 mg/m ³ TWA: 5 mg/m ³ | TWA: 10 mg/m ³ | STEL: 20 mg/m ³ TWA: 10 mg/m ³ |
| Quartz (Crystalline Silica) | TWA: 0.025 mg/m ³ | | TWA: 0.10 mg/m ³ | TWA: 0.1 mg/m ³ |

| Chemical Name | NIOSH IDLH |
|-----------------------------|-------------------------|
| Stoddard solvent | 20000 mg/m ³ |
| Quartz (Crystalline Silica) | 50 mg/m ³ |

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 | Impervious gloves. Long sleeved clothing. |
| Respiratory Protection | No special protective equipment required. |

Hygiene Measures

Wash hands before breaks and at the end of workday. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---------------------------------|-----------------------|
| Appearance | Black. |
| Odor | Petroleum distillates |
| Odor Threshold | Not available |
| Physical State | Liquid |
| pH | Not available |
| Flash Point | 120°F / 49°C |
| Method | Closed cup |
| Autoignition Temperature | 490°F / 254°C |
| Boiling Point/Range | 300°F / 149°C |

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|----------------------------|----------------------------|----------------------------|
| Freezing Point | Not available | |
| Flammability Limits in Air | Lower Not available | Upper Not available |
| Explosion Limits | Lower 0.8% | Upper 5.0% |
| Explosive Properties | Not available | |
| Oxidizing Properties | Not available | |
| Evaporation Rate | 40x Slower (ether = 1) | |
| Vapor Pressure | 5 mmHg @ 100 °F | |
| Vapor Density | 3.9 @ Air = 1 | |
| Specific Gravity | 1.03 (where air = 1) | |
| Solubility | Not available | |
| Water Solubility | Not available | |
| Volatiles | 15-25% | |
| VOC Content | 250 g/L | |

10. STABILITY AND REACTIVITY

| | |
|------------------------------------|---|
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Heat, flames and sparks. |
| Incompatible Materials | No materials to be especially mentioned. |
| Hazardous Decomposition Products | Carbon monoxide. Carbon dioxide (CO ₂). Hydrocarbons. |
| Possibility of Hazardous Reactions | Hazardous polymerisation does not occur |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Component Information

| Chemical Name | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-----------------------------|----------------|-------------------|-----------------|
| Petroleum Asphalt | 5000 mg/kg Rat | 2000 mg/kg Rabbit | |
| Asphalt | 5000 mg/kg Rat | 2000 mg/kg Rabbit | |
| Quartz (Crystalline Silica) | 500 mg/kg Rat | | |

Chronic Toxicity

Carcinogenicity

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

| Chemical Name | ACGIH | IARC | NTP | OSHA | Mexico |
|-----------------------------|-------|----------|-------|------|--------|
| Hydrous Alumino Silicate | | Group 2B | | X | |
| Quartz (Crystalline Silica) | A2 | Group 1 | Known | X | |

12. ECOLOGICAL INFORMATION

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants

| | |
|--|---------------|
| Persistence/Degradability | Not available |
| Bioaccumulation/ Accumulation | Not available |
| Mobility in Environmental Media | Not available |

Petroleum Asphalt

log Pow = 6

Asphalt

log Pow = 6

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

| | |
|---------------------------------|------------------------------|
| <u>DOT</u> | Not regulated |
| Subsidiary Class | |
| UN-No | 1999 |
| Reportable Quantity (RQ) | |
| <u>TDG</u> | Not regulated |
| Subsidiary Class | |
| <u>MEX</u> | Not regulated |
| Subsidiary Class | |
| <u>ICAO</u> | |
| UN-No | UN1999 |
| Proper Shipping Name | Tars, liquid |
| Hazard Class | 3 |
| Subsidiary Class | |
| Packing Group | III |
| Description | Tars, liquid, UN1999, PG III |
| <u>IATA</u> | |
| UN-No | UN1999 |
| Proper Shipping Name | Tars, liquid |

14. TRANSPORT INFORMATION

Hazard Class 3
Subsidiary Class
Packing Group III
ERG Code 3L
Description Tars, liquid, UN1999, PG III

IMDG/IMO

Proper Shipping Name Tars, liquid
Hazard Class 3
Subsidiary Class
UN-No UN1999
Packing Group III
EmS No. F-E, S-E
Description Tars, liquid, UN1999, PG III

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL | NDSL | EINECS | ELINCS | ENCS | CHINA | KECL | PICCS | AICS |
|-----------------------------|------|-----|------|--------|--------|------|-------|------|-------|------|
| Stoddard solvent | X | X | - | X | - | - | X | X | X | X |
| Petroleum Asphalt | X | X | - | X | - | - | X | X | X | X |
| Asphalt | X | X | - | X | - | - | X | X | X | X |
| Calcium Carbonate | X | - | X | X | - | - | X | X | X | X |
| Magnesium Carbonate | X | X | - | X | - | X | X | X | X | X |
| Hydrous Alumino Silicate | - | - | - | - | - | - | X | - | X | X |
| Quartz (Crystalline Silica) | X | X | - | X | - | X | X | X | X | X |

TSCA Does not Comply
DSL Does not Comply
NDSL Does not Comply
EINECS Does not Comply
ELINCS Does not Comply
ENCS Does not Comply
CHINA Complies
KECL Does not Comply
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 does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

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

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

| Chemical Name | CAS-No | Category | Type |
|-----------------------------|------------|------------|------|
| Hydrous Alumino Silicate | 12174-11-7 | Carcinogen | |
| Quartz (Crystalline Silica) | 14808-60-7 | Carcinogen | |

State Right-to-Know

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|-----------------------------|---------------|------------|--------------|----------|--------------|
| Stoddard solvent | X | X | X | | X |
| Petroleum Asphalt | X | X | X | | X |
| Asphalt | X | X | X | | X |
| Calcium Carbonate | X | | X | | X |
| Magnesium Carbonate | X | | | | X |
| Quartz (Crystalline Silica) | 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

D2B Toxic materials

| |
|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

Preparation Date 08-Dec-2006

Revision Date 18-Jan-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