

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: IronGrip 601

Synonyms: Water-Based Mastic

Manufacturer/Supplier

Carlisle HVAC Products
900 Hensley Lane
Wylie, TX 75098

Internet Address: <http://www.carlisleHVAC.com/>

Fax Number: (972) 442-0076

Phone Numbers

Medical Emergency:

CHEMTREC (USA): (800) 424-9300

CHEMTREC (International):

MSDS Assistance: (972) 442-6545

Fax On Demand: NA

Technical Assistance: (888) 229-2199

Customer Service: (888) 229-0199

2. COMPONENT INFORMATION

| Component | CAS No. | Percent Range | Hazardous in Blend |
|-----------------|----------|---------------|--------------------|
| Ethylene Glycol | 107-21-1 | 0.2 - 2 | |
| Methanol | 67-56-1 | 0.5 - 3 | |

This product is not hazardous according OSHA 29 CFR 1910.1200.

Hazards:

Flammable/Combustible No Acute No Chronic No Carcinogen No
Toxin No Toxin No
Pressure No Reactive No Exposure Limit No Target Organ No Other No

2A. OTHER INGREDIENTS Greater than 3%

| Component | CAS No. |
|----------------------|------------|
| Latex Co-polymer | 24937-78-8 |
| Calcium Carbonate | 1317-65-3 |
| Clay | 1332-58-7 |
| Chlorinated Paraffin | 63449-39-8 |

3. HAZARDS IDENTIFICATION

Emergency and Hazards Overview:

May cause moderate irritation to eyes. May be harmful if swallowed. Read and understand all health and safety information on the product label and Material Safety Data Sheet before use.

Ratings

Health 1 Flammability 0 Reactivity 0

Primary Route of Exposure: Skin x Inhalation x Eye x Ingestion x

Health Effect Information

Eye Contact: May cause eye irritation if wiped or rubbed into eyes.

Skin Contact: May cause mild skin irritation on prolonged or repeated contact.

Inhalation: Breathing high concentrations of vapors may cause nausea & irritation of nose, throat, & respiratory tract. Respiratory symptoms associated with pre-existing lung disorders may be aggravated by exposure to this material.

Ingestion: Ingestion of large quantity may cause initial central nervous system stimulation, followed by depression.

Medical Conditions Aggravated by Exposure: Prolonged exposure to vapors could aggravate pre-existing disorders in lungs, kidney and liver.

4. FIRST AID INFORMATION

Eye Contact: Flush with water for 15 minutes. Get medical attention immediately.

Skin Contact: Wipe off and wash skin with soap and water. Promptly remove contaminated clothing and wash before reuse.

Inhalation: Remove to fresh air. If breathing has stopped, start artificial respiration. Oxygen may be administered. Consult physician immediately

Ingestion: Do not induce vomiting unless directed to do so by a physician. Consult a physician immediately.

Notes to Physician: This product contains ethylene glycol, Hexahydro-1, 3,5-triethyl-s-triazine (not in a reportable amount).

5. FIRES AND EXPLOSION INFORMATION

Flammable Properties

Flash Point: No flash to boiling

Test Method: Closed cup

Flame extension: NA

Test Method: NA

Flammable Limits in Air

Upper Percent: NA

Lower Percent: NA

Auto ignition Temperature: NA

Test Method: NA

NFPA Classification: H 1 F 0 R 0

Extinguishing Media: CO₂, foam, dry chemical or water spray.

Fire Fighting Measures

Special Fire Fighting Procedures and Equipment: Firemen must wear full-face air-supplied masks and full protective clothing.

Unusual Fire and Explosion Conditions: This product is not sensitive to physical shock or static discharge. Exposure of closed container to temperatures above the boiling point could cause pressure buildup and container rupture.

Hazardous Combustion By-Products: CO, CO₂, unburned hydrocarbons, or nitrous oxides.

6. ACCIDENTAL RELEASE MEASURES

Personnel Safeguards: Evacuate non-essential personnel to safe areas. Clean-up responders should wear proper protective clothing and gloves before entering the affected area.

Regulatory Notifications: Certain component of this product is defined as hazardous according to U.S. EPA. Spill reporting requirements and reportable quantities vary by region. Consult all applicable state and local regulations. For Canada, observe all precautions noted above.

Containment and Clean up: Prevent product from entering drinking water supplies or streams. Observe above precautions, collect liquid with inert, noncombustible material and remove for disposal.

7. HANDLING AND STORAGE INFORMATION

Handling: Normal use condition doesn't produce respirable Silica. However, sanding, grinding, and burning might release respirable Silica. Keep out of reach of children. Launder contaminated clothing. Wash hands with soap and water after use, especially before eating or drinking.

Storage: Store in a dry, well ventilated environment away from heat, above 35 deg F and below 110 deg F. Keep containers closed when not in use. Do not pressurize, cut weld or grind containers.

Empty Container Warnings

Drums: Drums may be reused after wash.

Plastic: Plastic containers may be reused after wash.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION INFORMATION

Exposure Limits and Guidelines

| Component | CAS No. | Exposure Limit |
|-----------------|----------|---|
| Methanol | 67-56-1 | 200 ppm OSHA PEL 200 ppm ACGIH TWA, 250 ppm STEL |
| Ethylene Glycol | 107-21-1 | 50 ppm OSHA PEL/Ceiling |

Personal Protective Equipment

Eye/Face Protection: Wear safety goggles or face shield. Contact lenses should not be worn.

Skin Protection: Use protective rubber gloves (Hycron, neoprene, or nitrile).

Respiratory Protection: Provide adequate ventilation to maintain vapors below PEL/TWA. If vapor levels are exceeded, use NIOSH approved respirator, both during and immediately after application, until vapor levels are below limits.

Personal Hygiene: Avoid rubbing eyes during handling. Use good personal hygiene practices to avoid incidental ingestion.

Engineering Controls / Work Practices

Ventilation: Provide local exhaust or area ventilation to maintain concentration of vapors below PEL/TWA.

Other: Source of clean water should be available in the work area for flushing eyes and skin. Wash thoroughly with soap and water after use and before eating.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|--|
| Appearance: Gray Mastic | Vapor Pressure: 17 mm Hg @ 20°C |
| Odor: Typical latex with slight ammonia odor | Vapor Density (air=1): <air |
| Physical state: Mastic | Percent Volatile by Weight: 30 – 34 |
| pH: 8.0 – 9.0 | Volatile Organic Content: 49 g/l (according to SCAQMD calculation method) |
| DOT Corrosivity: NA | Molecular Weight: NA |
| Boiling Point: 212°F | Average Carbon Number: NA |
| Melting Point: NA | Viscosity @ 77 F: >300 K cps |
| Specific Gravity: 1.32 | |
| Pour Point: NA | |
| Solubility in Water: Miscible with water | |
| Octanol / Water Coefficient: Log K_{ow} = NA | |

10. STABILITY AND REACTIVITY INFORMATION

Chemical Stability: Stable

Conditions to Avoid: Avoid extreme heat, fire and temperature.

Incompatible Materials to Avoid: Avoid strong acids, strong oxidizers.

11. TOXICOLOGICAL INFORMATION (will only print available data)

Ethylene Glycol

Primary Eye Irritation: Irritating

Primary Skin Irritation: NA

Acute Dermal Toxicity: Product toxicity has not been determined.

Subacute Dermal Toxicity: NA

Dermal Sensitization: NA

Inhalation Toxicity: Product toxicity has not been determined.

Inhalation Sensitization: NA

Oral Toxicity: Product toxicity has not been determined. Following are component data:

LD₅₀, Ethylene Glycol: Rat 4,000 mg/kg

Mutagenicity: NA

Carcinogenicity: NA

Reproductive Toxicity: Product toxicity has not been determined. Following are component data:

Ethylene Glycol: Pregnant Rat 1.25g/kg and above: increased malformed fetus

Pregnant Mice 750 mg/kg and above: increased malformed fetus

Teratogenicity: NA

Immunotoxicity: NA

Neurotoxicity: NA

No other toxicological information available

12. ECOLOGICAL INFORMATION

Ethylene Glycol

Aquatic Toxicity: Not known

Terrestrial Toxicity: Not known

Chemical Fate and Transport: Not known

No other ecological information available

13. DISPOSAL INFORMATION

Regulatory Information: Consult all regulations (federal, state, provincial, local etc.) or a qualified waste disposal firm when characterizing waste for disposal.

Waste Disposal Methods: Recover free liquid. Absorb residue and dispose of according to local, state and Federal EPA regulation. Empty container: may contain explosive vapors. Do Not cut, puncture or weld on or nearby.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT)

Highway / Rail: Not regulated by DOT

International Highway (Transportation of Dangerous Goods-TDG): Not regulated

International Ocean (International Maritime Dangerous Goods – IMDG): Not regulated

International Air (International Air Transportation Authority – IATA): Not regulated

The DOT description is provided to assist in the proper shipping classification of this product and may not be suitable for all shipping descriptions.

Other: No other information available

15. REGULATORY INFORMATION

Regulatory Lists

U.S. TSCA Inventory: All components of this material are on the US TSCA Inventory or exempt from listing on the TSCA Inventory.

Sara Section 313: This product contains the following Sara, Title III, Section 313 Chemicals:

| Chemical | CAS Number | Percent in Product |
|-----------------|-------------------|---------------------------|
| Methanol | 67-56-1 | 0.5 - 3 |
| Ethylene Glycol | 107-21-1 | 0.2 - 2 |

IARC Group: NA

Regulatory Lists Searched

This product contains a mixture of one or more components found on the following State List at or above OSHA de minimis quantities

Health & Safety: NA

Environmental: NA

International: NA

State: FL, MA, MN, PA, NJ, WA

National Inventories: NA

SARA 311 / 312 Categories (For the chemicals above)

Acute: Yes **Chronic:** Yes **Fire:** Yes **Pressure:** No **Reactive:** No

Regulated: No

California Proposition 65 Information: Warning! None in the list

Canadian WHMIS Classification***Methanol*****Class:** Class B2 and D2B

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

Canadian Environmental Protection Act (CEPA)

All reportable chemical substance is listed on the Domestic Substances List (DSL) or otherwise complies with CEPA new substance notification requirements.

National Pollution Release Inventory (NPRI)

This product contains the following chemical subject to the reporting requirements of the CEPA subsection 16(1), NPRI.

| Chemical | CAS Number | Percent in Product |
|-----------------|-------------------|---------------------------|
| Methanol | 67-56-1 | 0.2 – 2 |
| Ethylene Glycol | 107-21-1 | 0.5 – 2 |

Other Regulations: No other information available.

16. OTHER INFORMATION**Health and Environmental Label Language**

All ingredients contained in this product are included on the US EPA Toxic Substances Control Act (TSCA) inventory or exempt from listing on the TSCA inventory. All ingredients contained in this product comply with the requirements of the Canadian Environmental Protection Act (CEPA) and are listed on the Domestic Substance List (DSL) or Non-Domestic Substance List (NDSL)

MSDS Revisions**Previous Version Date:** 1 March 2011**Section****Old Information:****New Information:****Prepared By:** R&D Department**Date:** 1 February 2014

Disclaimer of Warranty: The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. In many instances, especially when proprietary or trade secret materials are used, CCWI Company must rely upon the hazard evaluation of such components submitted by that product's manufacturer or importer. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for this particular use.