

# W. R. GRACE

## MATERIAL SAFETY DATA SHEET

Product Name: FlameSafe Intumescent Sleeve (FSIS), FlameSafe Device (FSD)

MSDS ID Number: Z-01581

MSDS Date: 01/28/2003

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** FlameSafe Intumescent Sleeve (FSIS), FlameSafe Device (FSD)  
**MSDS Number:** Z-01581  
**Cancelled MSDS Number:** New  
**MSDS Date:** 01/28/2003  
**Chemical Family Name:** Article containing Graphite, Polybutene Putty  
**Product Use:** Plastic Pipe Firestop Device  
**Chemical Formula:** Mixture-NA  
**CAS # (Chemical Abstracts):** Mixture-NA  
**Service Number):**

#### **Manufactured by:**

W.R.Grace & Co.-Conn.  
62 Whittemore Avenue  
Cambridge, MA 02140

Grace Canada, Inc.  
294 Clements Road West  
Ajax, Ontario L1S 3C6

#### **In Case of Emergency Call:**

In USA: (617) 876-1400 In Canada: (905) 683-8561

### SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

| <b>Ingredient</b>                            | <b>CAS#</b> | <b>Percent (max)</b> |
|--|-------------|----------------------|
| Dipentaerythritol                            | 000126-58-9 | 1-10                 |
| Graphite                                     | 007782-42-5 | 10-25                |
| Melamine                                     | 000108-78-1 | 1-10                 |
| Nitric acid                                  | 007697-37-2 | 1-10                 |
| Paraffin waxes and Hydrocarbon waxes, chloro | 063449-39-8 | 1-10                 |
| Polybutene                                   | 009003-29-6 | 25-50                |
| Sulfuric acid                                | 007664-93-9 | 1-10                 |

Note: Composition Information on ingredients and hazard warnings are provided for the putty component in the FlameSafe Intumescent Sleeve (FSIS), FlameSafe Device (FSI).

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### **SECTION 3 - HAZARDS IDENTIFICATION**

#### **Emergency Overview:**

##### **Caution!**

Causes eye irritation.

Causes skin irritation.

Causes digestive tract irritation if ingested.

Harmful if absorbed through skin.

#### **HMIS Rating:**

|                                |                   |
|--------------------------------|-------------------|
| Health:                        | 2                 |
| Flammability:                  | 0                 |
| Reactivity:                    | 0                 |
| Personal Protective Equipment: | B (See Section 8) |

#### **Potential Health Effects:**

##### **Inhalation:**

Is not an expected route of exposure. If putty is heated and vapors are released, inhalation may cause respiratory tract irritation.

Effects include: Sneezing, coughing, itching, burning, shortness of breath and wheezing.

##### **Eye Contact:**

Eye contact with putty causes irritation.

Prolonged eye contact can result in redness and itching.

##### **Skin Contact:**

Skin contact with putty causes irritation.

Prolonged skin contact can result in irritation causing redness and itching.

##### **Skin Absorption:**

Skin absorption is not an expected route of exposure.

##### **Ingestion:**

If putty component is ingested, causes irritation to the linings of the mouth, esophagus and stomach.

Effects include: Itching and burning.

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### **SECTION 4 - FIRST AID MEASURES:**

#### **Skin Contact:**

Wash with soap and water.

If discomfort or irritation persists, consult a physician.

Remove contaminated clothing and wash before reuse.

#### **Eye Contact:**

Flush eyes with water for at least 15 minutes while holding eyelids open.

If discomfort or irritation persists, consult a physician.

#### **Ingestion:**

Do not induce vomiting.

Never give anything by mouth to an unconscious person.

If discomfort or irritation persists, consult a physician.

#### **Inhalation:**

If symptoms develop, get fresh air. If symptoms persist, consult a physician.

If breathing has stopped, give artificial respiration then oxygen if needed.

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### **SECTION 5 - FIRE AND EXPLOSION HAZARD DATA**

|                                   |                |
|-----------------------------------|----------------|
| <b>Flash Point:</b>               | Not Applicable |
| <b>Flash Point Method:</b>        | Not Applicable |
| <b>Lower Explosion Limit:</b>     | Not Available  |
| <b>Upper Explosion Limit:</b>     | Not Available  |
| <b>Auto-Ignition Temperature:</b> | Not Available  |

### **NFPA Rating:**

|                      |   |
|----------------------|---|
| <b>Health:</b>       | 1 |
| <b>Flammability:</b> | 0 |
| <b>Reactivity:</b>   | 0 |

**Extinguishing Media:** Product will not support combustion. Use alcohol foam, Carbon dioxide, dry chemical or water to treat surrounding fire.

#### **Special Fire Fighting Procedures:**

Wear self-contained breathing apparatus and complete personal protective equipment when potential for exposure to vapors or products of combustion exist. Isolate area and keep unnecessary people away.

No special procedures specific to this product.

#### **Unusual Fire and Explosion Hazards:**

None unless noted below.

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### **SECTION 6 - ACCIDENTAL RELEASE MEASURES:**

#### **Spills/Leaks:**

Due to the physical nature of this product, spills are unlikely.

### **SECTION 7 - HANDLING AND STORAGE**

#### **Precautionary Measures:**

Avoid contact with eyes, skin and clothing.

Do not take internally.

Practice good personal hygiene to avoid ingestion.

FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

### **SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTIVE EQUIPMENT**

#### **EXPOSURE GUIDELINES (US)**

| Ingredient                                   | ACGIH TLV   |                                |         | OSHA PEL  |  |         | Other |
|--|---|--------------------------------|---------|---|--|---------|-------|
|  | TWA   | STEL                           | Ceiling | TWA   | STEL   | Ceiling |       |
| Dipentaerythritol                            | -   | -                              | -       | -   | -  | -       | -     |
| Graphite                                     | 2 mg/m <sup>3</sup><br>TWA<br>(respirable<br>fraction) (all<br>forms except<br>graphite fibers) | -                              | -       | respirable<br>dust: 2.5<br>mg/m <sup>3</sup><br>TWA | -  | -       | -     |
| Melamine                                     | -   | -                              | -       | -   | -  | -       | -     |
| Nitric acid                                  | 2 ppm TWA   | 4 ppm<br>STEL                  | -       | 2 ppm<br>TWA; 5<br>mg/m <sup>3</sup><br>TWA         | 4 ppm<br>STEL; 10<br>mg/m <sup>3</sup><br>STEL | -       | -     |
| Paraffin waxes and Hydrocarbon waxes, chloro | -   | -                              | -       | -   | -  | -       | -     |
| Polybutene                                   | -   | -                              | -       | -   | -  | -       | -     |
| Sulfuric acid                                | (1 mg/m <sup>3</sup> )<br>TWA   | (3 mg/m <sup>3</sup> )<br>STEL | -       | 1 mg/m <sup>3</sup><br>TWA                          | -  | -       | -     |

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### EXPOSURE GUIDELINES (CANADA)

Employers should consult local Provincial regulatory limits for exposure guidelines which may vary locally.

**Engineering Controls:** Not generally required.

#### **Personal Protective Equipment:**

**Respiratory Protection:** Respiratory protection is not generally required. However, if exposure limits (Section 8) are exceeded or respiratory irritation develops due to inhalation, a NIOSH approved respirator is recommended.

**Skin Protection:** Impervious (PVC, latex or nitrile) gloves should be worn anytime direct contact is possible.

**Eye Protection:** Safety glasses or goggles should be worn.

**Work/Hygienic Practices:** Use good personal hygiene practices.  
None beyond those noted above.

### SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

|   |   |
|---|---|
| <b>Physical State:</b>                        | Article containing Black Firestop Putty |
| <b>Appearance/Odor:</b>                       | Slight Rubber Odor.                     |
| <b>Odor Threshold:</b> (ppm)                  | Not Determined                          |
| <b>pH:</b>                                    | Not Available                           |
| <b>Vapor Pressure:</b> (Mm Hg)                | Unknown                                 |
| <b>Vapor Density:</b> (Air = 1)               | Not Applicable                          |
| <b>Solubility In Water:</b>                   | Not Applicable                          |
| <b>Specific Gravity:</b> (Water = 1)          | Not Available                           |
| <b>Evaporation Rate:</b> (Butyl Acetate = 1)  | Not Applicable                          |
| <b>Boiling Point:</b>                         | Not Applicable                          |
| <b>Viscosity:</b>                             | Unknown                                 |
| <b>Bulk Density:</b> (Pounds/Cubic Foot)(Pcf) | Not Applicable                          |
| <b>% Volatiles (gr/L):</b> (70°F) (21°C)      | Not Applicable                          |

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### SECTION 10 - STABILITY AND REACTIVITY

**Chemical Stability:** Stable  
**Conditions To Avoid:** Oxidizing materials, Strong oxidizers and Reducing agent.  
**Hazardous Polymerization:** Will not polymerize.  
**Hazardous Decomposition Products:** Carbon dioxide, Carbon monoxide and Hydrochloric acid.

### SECTION 11 - TOXICOLOGICAL INFORMATION

| <u>Ingredient(No data unless listed.)</u>    | <u>CAS Number</u> | <u>LD50 and LC50</u>   |
|--|-------------------|--|
| Melamine                                     | 000108-78-1       | Inhalation LC50 Rat : 3248 mg/m <sup>3</sup> ;<br>Oral LD50 Rat : 3161 mg/kg;<br>Oral LD50 Mouse : 3296 mg/kg  |
| Nitric acid                                  | 007697-37-2       | Inhalation LC50 Rat : 67 ppm(NO <sub>2</sub> )/4H  |
| Paraffin waxes and Hydrocarbon waxes, chloro | 063449-39-8       | Oral LD50 Rat : >21500 uL/kg;<br>Dermal LD50 Rabbit : >10 mL/kg  |
| Sulfuric acid                                | 007664-93-9       | Inhalation LC50 Rat : 510 mg/m <sup>3</sup> /2H;<br>Inhalation LC50 Mouse : 320 mg/m <sup>3</sup> /2H;<br>Oral |

#### Carcinogenicity:

| Ingredient                                   | IARC Group 1 | IARC Group 2A | IARC Group 2B | NTP Known | NTP Suspect | OSHA |
|--|--------------|---------------|---------------|-----------|-------------|------|
| Dipentaerythritol                            | No           | No            | No            | No        | No          | No   |
| Graphite                                     | No           | No            | No            | No        | No          | No   |
| Melamine                                     | No           | No            | No            | No        | No          | No   |
| Nitric acid                                  | No           | No            | No            | No        | No          | No   |
| Paraffin waxes and Hydrocarbon waxes, chloro | No           | No            | No            | No        | No          | No   |
| Polybutene                                   | No           | No            | No            | No        | No          | No   |
| Sulfuric acid                                | Yes          | No            | No            | No        | No          | Yes  |

Sulfuric acid contained in this product has been classified as a known human carcinogen. This classification applies to "strong inorganic mists containing sulfuric acid". Melamine contained in this product has caused cancer in laboratory animal studies. There is no current association with this effect in humans.

**Mutagenicity:** Not applicable.  
**Teratogenicity:** Not applicable.  
**Reproductive Toxicity:** Not applicable.

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### SECTION 12 - ECOLOGICAL INFORMATION

**Environmental Fate:** No data available for product.  
**Ecotoxicity:** No data available for product.

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### SECTION 13 - DISPOSAL CONSIDERATIONS

**Waste Disposal Procedures:**

Consult all regulations (federal, state, provincial, local) or a qualified waste disposal firm when characterizing waste for disposal. According to EPA (40 CFR § 261), waste of this product is not defined as hazardous. Dispose of waste in accordance with all applicable regulations.

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### SECTION 14 - TRANSPORTATION INFORMATION

**Proper Shipping Name:** Not Applicable  
**UN/NA Number:** Not Applicable  
**Domestic Hazard Class:** Nonhazardous  
**Surface Freight Classification:** Not Applicable  
**Label/Placard Required:** Not Applicable

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### SECTION 15 - REGULATORY INFORMATION

**REGULATORY CHEMICAL LISTS:**

**CERCLA (Comprehensive Response Compensation and Liability Act):**

**(None present unless listed below)**

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt %</u> | <u>CERCLA RQ</u>                |
|----------------------|--------------|-------------|---------------------------------|
| Nitric acid          | 007697-37-2  | 5.7         | final RQ = 1000 pounds (454 kg) |
| Sulfuric acid        | 007664-93-9  | 5.7         | final RQ = 1000 pounds (454 kg) |

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### SARA Title III (Superfund Amendments and Reauthorization Act)

#### **SARA Section 312/Tier I & II Hazard Categories:**

|                          |    |
|--------------------------|----|
| Health Immediate (acute) | No |
| Health Delayed (chronic) | No |
| Flammable                | No |
| Reactive                 | No |
| Pressure                 | No |

#### **302 Reportable Ingredients (Identification Threshold 1%.):**

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt %</u> | <u>SARA 302 TPQ</u>                 |
|----------------------|--------------|-------------|-------------------------------------|
| Nitric acid          | 007697-37-2  | 5.7         | TPQ = 1000 pounds; RQ = 1000 pounds |
| Sulfuric acid        | 007664-93-9  | 5.7         | TPQ = 1000 pounds; RQ = 1000 pounds |

#### **313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):**

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt %</u> |
|----------------------|--------------|-------------|
| Nitric acid          | 007697-37-2  | 5.7         |
| Sulfuric acid        | 007664-93-9  | 5.7         |

#### **National Volatile Organic Compound Emission Standards For Architectural Coatings:**

**Volatile Organic Content:** (gr/L) Not Applicable

**WHMIS Classification(s):** D2 B

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

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### State Regulatory Information:

#### California Proposition 65:

This product does not contain substances known to the state of California to cause cancer, birth defects or other reproductive harm.

#### Massachusetts Hazardous Substance List(Identification threshold 0.001%(1ppm)):

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt %</u> |
|----------------------|--------------|-------------|
| Nitric acid          | 007697-37-2  | 5.7         |
| Sulfuric acid        | 007664-93-9  | 5.7         |

#### New Jersey Hazardous Substance List(Identification threshold (0.1%)):

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt %</u> |
|----------------------|--------------|-------------|
| Nitric acid          | 007697-37-2  | 5.7         |
| Sulfuric acid        | 007664-93-9  | 5.7         |

#### Pennsylvania Hazardous Substance List(Identification threshold 0.01%):

| <u>Chemical Name</u> | <u>CAS #</u> | <u>Wt %</u> |
|----------------------|--------------|-------------|
|----------------------|--------------|-------------|

### CHEMICAL INVENTORY STATUS:

All chemicals in this product are listed or exempt from listing in the following countries:

| US   | CANADA |      | EUROPE         | AUSTRALIA | JAPAN          | KOREA | PHILIPPINES |
|------|--------|------|----------------|-----------|----------------|-------|-------------|
| TSCA | DSL    | NDSL | EINECS/ELINCS  | AICS      | ENCS           | ECL   | PICCS       |
| Yes  | Yes    | Yes  | Not Determined | Yes       | Not Determined | Yes   | Yes         |

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### **SECTION 16 - OTHER INFORMATION**

#### **Non-Hazardous Ingredient Disclosure:**

**Chemical Name**

**CAS Number**

**Prepared by:**

EH&S Department

**Approved by:**

EH&S Department

**Approved Date:**

10/30/2001

#### **Disclaimer:**

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."