



# FIRE RETARDANT FS-PG™ PERIMETER GUARD

## SAFETY DATA SHEET

### SECTION 1 PRODUCT & COMPANY INFORMATION

#### 1.1 Product Identifier

|              |                           |
|--------------|---------------------------|
| Product Name | FS-PG™ PERIMETER GUARD    |
| Brand        | Flame Seal Products, Inc. |
| CAS #        | NA / mixture              |

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

|                 |                                       |
|-----------------|---------------------------------------|
| Identified uses | Water soluble, fire retardant powder. |
|-----------------|---------------------------------------|

#### 1.3 Details of the Supplier of the Safety Data Sheet

|           |  |
|-----------|--|
| Company   | Flame Seal Products, Inc.<br>15200 West Drive<br>Houston, TX 77053 USA |
| Telephone | 713-668-4291   |
| Fax       | 713-668-1724   |

#### 1.4 Emergency telephone number

|             |              |
|-------------|--------------|
| Emergency # | 800-424-9300 |
|-------------|--------------|

### SECTION 2 HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritant, eye irritant

For the full text of the H-statements mentioned in this section, see Section 16.

#### 2.2 GHS Label Elements, including precautionary statements

##### Hazard Statements

|           |                              |
|-----------|------------------------------|
| H316 : 3  | Causes mild skin irritation. |
| H320 : 2B | Causes eye irritation.       |

##### Precautionary Statements

|                    |  |
|--------------------|--|
| P202               | Do not handle until all safety precautions have been read and understood.                                      |
| P260               | Do not breathe dust or mist.   |
| P264               | Wash skin thoroughly if exposed.   |
| P280               | Wear eye/face protection.  |
| P281               | Use personal protection equipment as required.   |
| P84                | In case of inadequate ventilation wear respiratory protection.   |
| P305 + P351 + P338 | If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. |
| P332 + 313         | If skin irritation occurs: get medical advice/attention.   |
| P337 + P313        | If eye irritation persists: get medical advice/attention.  |

#### 2.3 Other Hazards

|      |   |
|------|---|
| H303 | If eye irritation persists: get medical advice/attention. |
|------|---|

For the full text of the H-statements mentioned in this section, see section 16.

**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

|   |   |
|---|---|
| <b>3.1 Substances</b>                     |   |
| Formula                                   | Mixture of water soluble organic and inorganic salts. |
| <b>Hazardous Components</b>               | <b>Wt. %</b>  |
| Proprietary nitrogen and phosphate blend* | > 95  |
| Performance additives                     | < 5   |

\* Components are a Company Trade Secret – Business Confidential. Flame Seal Products Inc. is withholding the specific chemical identity under provision of the OSHA Hazard Communication Rule Trade Secrets (1910.1200(i)(1)). The specific chemical identity will be made available to health professionals in accordance with 29 CFR 1910.1200(i)(1)(2)(3)(4).

**SECTION 4 FIRST AID MEASURES**

|   |   |
|---|---|
| <b>4.1 Description of first aid measures</b>  |   |
| <b>If inhaled</b>   | Not expected to be an issue. Move person to fresh air.  |
| <b>In case of skin contact</b>  | Wash with soap and plenty of water. If irritation occurs, get medical advice/attention.   |
| <b>In case of eye contact</b>   | Flush eyes with plenty of fresh water while holding eyelids open. Remove contact lenses if worn. If eye irritation persists, get medical advice/attention.                    |
| <b>If swallowed</b>   | Do not induce vomiting. Never give anything by mouth to an unconscious person. Flush mouth with water. If conscious give water to further dilute chemical. Consult physician. |
| <b>4.2 Most important symptoms and effects, both acute and delayed</b>                | The most important known symptoms and effects are described in the labelling (see section 2.2) or in Section 11.  |
| <b>4.3 Indication of any immediate medical attention and special treatment needed</b> | No data available   |

**SECTION 5 FIRE FIGHTING MEASURES**

|  |   |
|--|---|
| <b>5.1 Extinguishing media</b>                               | Not combustible (use water spray, fog, foam, dry chemicals, CO <sub>2</sub> or other agents as appropriate for material in surrounding fire). |
| <b>5.2 Special hazards arising from substance or mixture</b> | Heating and/or burning may liberate small amounts of ammonia, carbon oxides, nitrogen oxides.   |
| <b>5.3 Advice for firefighters</b>                           | Not combustible (use safety equipment which is suitable for materials in surrounding fire).   |
| <b>5.4 Further information</b>                               | No data available   |

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

|  |  |
|--|--|
| <b>6.1 Personal precautions, protective equipment and emergency procedures</b> | Use personal protective equipment. Avoid breathing mist. Ensure adequate ventilation. Evacuate personnel from affected area.<br>For personal protection, see Section 8.  |
| <b>6.2 Environmental precautions</b>   | Prevent further leakage or spillage, if safe to do so. Prevent material from entering public sewer system or any waterways.<br>Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies. |
| <b>6.3 Methods and materials for containment and cleaning up.</b>              | Confine spilled liquid material and absorb with sand, sawdust, earth or other available solids. Sweep or vacuum up solid material and place in a suitable container for disposal. Avoid generating dust.   |
| <b>6.4 Reference to other sections</b>   | See Section 13 for further disposal info.  |

**SECTION 7 HANDLING & STORAGE**

|   |  |
|---|--|
| <b>7.1 Precautions for safe handling</b>                            | Wear appropriate protective equipment. Provide adequate ventilation. See Sections 2.2 and 8.   |
| <b>7.2 Conditions for safe storage, including any incompatibles</b> | Keep container tightly sealed when not in use. Use good industrial practices to avoid spills. Exposure to strong bases and/or heat may liberate ammonia. |
| <b>7.3 Specified end use</b>  | Used mainly as a passive fire retardant for dry brush, grasses, and other cellulosic material in fire prone areas.                                       |

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www.flameseal.com | 713-668-4291 (office) | 713-668-1724 (fax) | **Emergency No. (Chemtrec): 800-424-9300**

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**SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION**

| 8.1 Control Parameters                                      |   |  |
|---|---|--|
| Components with workplace control parameters (Dry product): | ACGIH                                     | OSHA   |
| <b>Personal Protection Equipment</b>                        | Respiratory Protection (Specify Type)     | 10 mg/m <sup>3</sup> TWA inhalable particles<br>3 mg/m <sup>3</sup> TWA respirable particles<br>Respiratory protection not normally required while spraying liquid outdoors. If inadequate ventilation is present while spraying, wear respiratory protection approved for organic mists. When handling the powder, where protection from nuisance dusts are desired, use type N95(US) or P1(EN 143) dust masks. |
|   | Protective Gloves                         | Wear impervious gloves as necessary to avoid excessive skin contact (i.e. rubber or neoprene)  |
|   | Eye Protection                            | Protective glasses or goggles in dust areas.   |
|   | Other Protective Equipment                | Adequate clothing to minimize direct contact with skin.  |
|   | <b>Engineering Measures/Controls</b>      | Local Exhaust  |
|   | Mechanical (General)                      | For outdoor application.   |
|   | General Industrial Hygiene Considerations | Do not use, and or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating drinking, using tobacco, applying cosmetics, or using toilet.  |
|   | Special                                   | NA   |

**SECTION 9 PHYSICAL PROPERTIES AND CHEMICAL PROPERTIES**

| 9.1 Information on Basic Physical & Chemical Properties |  |  |                                   |
|---|--|--|-----------------------------------|
| a) Appearance   | Whitish powder – clear to hazy liquid when diluted | k) Vapor pressure                        | No data available                 |
| b) Odor   | None to Mild Amonia                                | l) Vapor density                         | No data available                 |
| c) Odor threshold                                       | NA   | m) Relative density                      | 1.02–1.33–depending on mix ratio  |
| d) pH   | 6.0 – 7.5 mixed concentrate                        | n) Water solubility                      | Completely soluble                |
| e) Melting/freezing point                               | NA / ~30 °F  | o) Partition coefficient n-octanol/water | No data available                 |
| f) Initial boiling point                                | ~212 °F  | p) Auto ignition temp                    | None                              |
| g) Flash point  | No data available                                  | q) Decomposition temp                    | No data available                 |
| h) Evaporation rate                                     | No data available                                  | r) Viscosity                             | ~30–60 cP -depending on mix ratio |
| i) Flammability   | None   | s) Explosive properties                  | No data available                 |
| j) Upper/lower flamm limits                             | No data available                                  | t) Oxidizing properties                  | No data available                 |

**SECTION 10 STABILITY & REACTIVITY**

|   |  |
|---|--|
| 10.1 Reactivity                         | No data available  |
| 10.2 Chemical Stability                 | Stable under recommended storage conditions              |
| 10.3 Possibility of hazardous reactions | None known   |
| 10.4 Conditions to avoid                | Moisture – Keep container sealed tightly when not in use |
| 10.5 Incompatible materials             | Strong bases and alkalis                                 |
| 10.6 Hazardous decomposition products   | Ammonia, nitrous oxides, carbon oxides                   |

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**SECTION 11 TOXICOLOGICAL INFORMATION**

| 11.1 Information on toxicological effects (Undiluted Chemicals) |  |
|---|--|
| Acute toxicity  | LD50 Oral (rat) 8471 mg/kg   |
| Inhalation  | Liquid not expected to be harmful. Use respirator if adequate ventilation is not possible to keep dust or mist exposure to reasonable levels.      |
| Dermal  | Not expected to be an issue. Wash area thoroughly with soap and water if exposed.  |
| Skin corrosion/irritation                                       | May cause mild skin irritation with prolonged exposure.  |
| Serious eye damage/eye irritation                               | May cause mild irritation with direct contact. Wear eye protection when spraying or handling powder.   |
| Respiratory or skin sensitization                               | May cause respiratory irritation with heavy exposure. Do not breathe concentrated dust or mist. Wear appropriate respirator as conditions warrant. |
| Germ cell mutagenicity  | No data available  |
| Carcinogenicity   |  |
| IARC  | No components of this product present at levels $\geq 0.1\%$ is identified as a probable, possible, or confirmed human carcinogen by IARC.         |
| NTP   | No components of this product present at levels $\geq 0.1\%$ is identified as a probable, possible, or confirmed human carcinogen by NTP.          |
| OSHA  | No components of this product present at levels $\geq 0.1\%$ is identified as a probable, possible, or confirmed human carcinogen by OSHA.         |
| Specific organ toxicity (single exposure)                       | No data available  |
| Specific organ toxicity (repeated exposure)                     | No data available  |
| Aspiration hazard   | No data available  |
| Additional Information  | RTECS: YR6250000<br>To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.      |

**SECTION 12 ECOLOGICAL INFORMATION**

| 12.1 Toxicity                                     |  |
|---|--|
| Toxicity to fish                                  | LC50 – Fathead minnow – 155 mg/l - 96h<br>Rainbow trout -> 85.9 mg/l - 96h OECD Test 203<br>Guppy -> 17,500 mg/l - 96h             |
| Toxicity to daphnia & other aquatic invertebrates | EC50 – Daphnia Magna (Water flea) – 140 mg/l - 21d<br>Conclusions from individual ingredient listing from manufacturers documents. |
| 12.2 Persistence & degradability                  | No data available  |
| 12.3 Bioaccumulation potential                    | No data available  |
| 12.4 Mobility in soil                             | No data available  |
| 12.5 Results of PBT & vPvP assessment             | Not required. Not conducted.   |
| 12.6 Other adverse effects                        | No data available  |

**SECTION 13 DISPOSAL CONSIDERATIONS**

| 13.1 Waste treatment methods |  |
|------------------------------|--|
| Product                      | Incinerate or bury powder in a suitable land fill where permitted by local regulations. Liquid product may be evaporated and treated the same - or contact a licensed disposal facility. |
| Contaminated packaging       | Dispose of a unused product.   |

**SECTION 14 TRANSPORT INFORMATION**

|          |                     |
|----------|---------------------|
| DOT (US) | Not dangerous goods |
| IMDG     | Not dangerous goods |
| IATA     | Not dangerous goods |

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**SECTION 15 REGULATORY INFORMATION**

|                                |  |
|--------------------------------|--|
| SARA 302 Components            | No chemicals in this product are subject to the reporting requirements of SARA Title III, section 302.                                       |
| SARA 313 Components            | The following components are subject to reporting levels Established by SARA Title III, section 313. None.                                   |
| SARA 311/312                   | No SARA hazards.   |
| California Prop. 65 Components | This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm. |

**SECTION 16 OTHER INFORMATION**

Full text of H-statements referred to under sections 2 and 3

|           |                             |
|-----------|-----------------------------|
| H316 : 3  | Cause mild skin irritation. |
| H320 : 2B | Causes eye irritation.      |

Hazard pictograms not required per Tables 3.2.5, 3.2.5.1, 3.3.5, 3.3.5.1 of the GHS of Classification and Labeling of Chemicals Fifth Revised Edition.

|             |                       |   |
|-------------|-----------------------|---|
| HMIS Rating | Health hazard         | 1 |
|             | Chronic health hazard | * |
|             | Flammability          | 0 |
|             | Physical hazard       | 0 |

|      |                   |   |
|------|-------------------|---|
| NFPA | Health hazard     | 1 |
|      | Fire hazard       | 0 |
|      | Reactivity hazard | 0 |

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