



# FIRE RETARDANT COATING FX100® INTUMESCENT COATING

## SAFETY DATA SHEET

### SECTION 1 PRODUCT & COMPANY INFORMATION

#### 1.1 Product Identifier

|              |                            |
|--------------|----------------------------|
| Product Name | FX100® INTUMESCENT COATING |
| Brand        | Flame Seal Products, Inc.  |
| CAS #        | NA                         |

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

|                 |                                     |
|-----------------|-------------------------------------|
| Identified uses | Intumescent fire retardant coating. |
|-----------------|-------------------------------------|

#### 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)  
Eye irritant (2B), Skin irritant (3)

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

|                   |         |
|-------------------|---------|
| Hazard Statements | WARNING |
|-------------------|---------|

|           |                              |
|-----------|------------------------------|
| 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.                          |
| P264               | Wash skin thoroughly if exposed.   |
| P280               | Wear eye/face protection.  |
| P281               | Use personal protection equipment as required.   |
| P305 + P351 + P338 | In case of eye contact: rinse thoroughly with eyelid(s) held open. Remove contact lenses, if worn. |
| P332 + 313         | If skin irritation occurs: get medical advice/attention.   |
| P337 + P313        | If eye irritation persists: get medical advice/attention.  |

#### 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

|      |                              |
|------|------------------------------|
| H303 | May be harmful if swallowed. |
|------|------------------------------|

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

### SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

|         |   |           |
|---------|---|-----------|
| Formula | Proprietary aminic phosphate polymer in water     | 57 +/- 5% |
|         | Proprietary performance additives (non hazardous) | 12 +/- 5% |
|         | Water   | 31 +/- 5% |

| Hazardous Components    | Classification                  | Concentration |
|-------------------------|---------------------------------|---------------|
| amine phosphate polymer | eye (2), mild skin irritant (3) | 57 +/- 5%     |

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**SECTION 4 FIRST AID MEASURES**

|     |  |   |
|-----|--|---|
| 4.1 | Description of first aid measures  |   |
|     | General advice   | Use good industrial hygiene procedures.   |
|     | If inhaled   | Not expected to be an issue in low quantities. Wear respirator rated for organic mist in if adequate ventilation is not available.  |
|     | In case of skin contact  | Wash with soap and plenty of water. If irritation occurs, get medical advice/attention.   |
|     | In case of eye contact   | Flush eyes with plenty of fresh water while holding eyelids open. Remove contact lenses if worn. If eye irritation persists, get medical advice/attention.                    |
|     | If swallowed   | 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. |
| 4.2 | Most important symptoms and effects, both acute and delayed                | The most important known symptoms and effects are described in the labelling (see section 2.2) or in Section 11.  |
| 4.3 | Indication of any immediate medical attention and special treatment needed | No data available   |

**SECTION 5 FIRE FIGHTING MEASURES**

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

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

|     |   |   |
|-----|---|---|
| 6.1 | Personal precautions, protective equipment and emergency procedures | Use personal protective equipment. Avoid breathing mist. Ensure adequate ventilation. Evacuate personnel from affected area.<br>For personal protection, see Section 8. |
| 6.2 | Environmental precautions   | Prevent further leakage or spillage, if safe to do so. Keep out of drains.  |
| 6.3 | Methods and materials for containment and cleaning up.              | Confine spilled material and absorb with sand, sawdust, earth or other available solids. Sweep up and place in a suitable container for disposal.                       |
| 6.4 | Reference to other sections   | See Section 13 for further disposal info.   |

**SECTION 7 HANDLING & STORAGE**

|     |  |   |
|-----|--|---|
| 7.1 | Precautions for safe handling                            | Wear appropriate protective equipment. Provide adequate ventilation. See Sections 2.2 and 8.        |
| 7.2 | Conditions for safe storage, including any incompatibles | Keep container tightly sealed when not in use. Use good industrial practices to avoid spills.       |
| 7.3 | Specified end use  | Rated fire protective coating for wood, plastic and other substrates. See TDS for more information. |

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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 | NA   |  |
| Engineering Controls                         | Handle in accordance with good industrial and safety practices. Wash hands after handling. |  |
| Personal Protection Equipment                | Respiratory Protection (Specify Type)  | For heavy mist exposure, use a NIOSH/MSHA approved respirator suitable for use with organic vapors if proper ventilation cannot be provided. |
|  | Protective Gloves  | Wear impervious gloves as necessary to avoid excessive skin contact (i.e. rubber or neoprene)  |
|  | Eye Protection   | Protective glasses or goggles in heavy mist areas.   |
|  | Other Protective Equipment   | Adequate clothing to minimize direct contact with skin.  |
|  | Ventilation  | Local Exhaust  |
| Mechanical (general)                         |  | Normal room ventilation.   |
| Special                                      |  | NA   |

**SECTION 9 PHYSICAL PROPERTIES AND CHEMICAL PROPERTIES**

9.1 Information on Basic Physical & Chemical Properties

|                             |                   |  |                       |
|-----------------------------|-------------------|--|-----------------------|
| a) Appearance               | Clear liquid      | k) Vapor pressure                        | No data available     |
| b) Odor                     | None              | l) Vapor density                         | No data available     |
| c) Odor threshold           | NA                | m) Relative density                      | 1.36 – 1.41           |
| d) pH                       | 2.0 - 3.0         | 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              | None to boiling   | q) Decomposition temp                    | No data available     |
| h) Evaporation rate         | No data available | r) Viscosity                             | 400-600 cP Brookfield |
| 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                | Evaporation – Keep container sealed tightly when not in use |
| 10.5 Incompatible materials             | Strong bases and alkalis                                    |
| 10.6 Hazardous decomposition products   | Phosphorous, nitrogen oxides                                |

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**SECTION 11 TOXICOLOGICAL INFORMATION**

11.1 Information on toxicological effects (Undiluted Chemicals)

|   |  |
|---|--|
| Acute toxicity                              | LD50 Oral (rat) > 2000 mg/kg<br>LD50 Dermal (rat) > 5000 mg/kg<br>Conclusions drawn from relevant literature and documentation from similar products.  |
| Inhalation                                  | Not established. Not expected to be harmful. If necessary, use respirator if adequate ventilation is not possible to keep exposure to particulate matter at a minimum in heavy mist areas when spraying. |
| Dermal                                      | May be irritating with continual contact.  |
| Skin corrosion/irritation                   | No available data  |
| Serious eye damage/eye irritation           | May cause moderate eye irritation if exposed.  |
| Respiratory or skin sensitization           | Prolonged exposure may cause skin reddening.   |
| 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.  |
| Reproductive toxicity (Ingredients)         | No data available  |
| Specific organ toxicity (single exposure)   | No data available  |
| Specific organ toxicity (repeated exposure) | No data available  |
| Aspiration hazard                           | No data available  |
| Additional Information                      | RTECS: ED4550000   |

**SECTION 12 ECOLOGICAL INFORMATION**

12.1 Toxicity (Undiluted Chemicals/Ingredients)

|   |   |
|---|---|
| Toxicity to fish                                  | LC50 – Ptychocheilus Lucius – 279 mg/l - 96h<br>Rainbow trout - > 85.9 mg/l - 96h OECD Test 203<br>LC0 – Lepomis macrochirrus (Bluegill) -> 1021 mg/l - 96h                                   |
| Toxicity to daphnia & other aquatic invertebrates | LC50 – Daphnia Magna (Bluegill) – 53.2 mg/l - 21d<br>EC50 – Daphnia Magna (Water flea) – 133 mg/l -21d<br>Conclusions drawn from relevant literature and documentation from similar products. |
| 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 mix with T50 curing agent and allow mixture to solidify, then bury in a suitable land fill where permitted by local regulations. Or contact a licensed disposal facility. |
| Contaminated packaging | Dispose of a unused product.  |

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**SECTION 14 TRANSPORT INFORMATION**

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

**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  | This product does not contain any chemical components with known CAS numbers that exceed the threshold (DeMinimis) reporting levels established by SARA Title III, section 313.  |
| SARA 311/312   | This product does not contain any SARA 311/312 hazards.  |
| New Jersey, Pennsylvania, Massachusetts Right to Know Components | This product contains no listed components.  |
| Clean Water Act  | Section 311 lists phosphorous as a hazardous substance, which if discharged into or upon water, will present an imminent and substantial danger to public welfare. Spills of >= 5000 pounds (approx. 50,000 pounds of FSTB) must be reported to the National Response Center @ 1-800-424-8802. |
| 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.

Hazards by conclusion drawn from relevant literature and documentation from similar products.

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

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