



FIRE RETARDANT
SHINGLE SEAL™
SAFETY DATA SHEET

SECTION 1 PRODUCT & COMPANY INFORMATION

1.1 Product Identifier

Product Name	SHINGLE SEAL™
Brand	Flame Seal Products, Inc.
CAS #	NA

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

Identified uses	Fire retardant liquid for treating cedar shingles and shakes.
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1.3 Details of the Supplier of the Safety Data Sheet

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

1.4 Emergency telephone number

Emergency #	800-424-9300
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SECTION 2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Reproductive toxicity (2), Eye irritation (2), Skin irritation (3)

2.2 GHS Label Elements, including precautionary statements



Hazard Statements

H316 : 3	Causes mild skin irritation.
H320 : 2B	Causes eye irritation.
H361 : 2	Suspected of damaging fertility or the unborn child.

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

Precautionary Statements

P201	Obtain special instructions before use.
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.
P308 + P313	If exposed or concerned, get medical advice.
P332 + 313	If skin irritation occurs: get medical advice/attention.
P337 + P313	If eye irritation persists: get medical advice/attention.
P405	Store locked up.
P501	Dispose of contents/container using approved waste disposal facility.

2.3 Other Hazards

H303	May be harmful if swallowed.
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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		> 90%
Classification	*Proprietary non toxic, non hazardous performance additives		5-10%
Hazardous Components		Classification	Concentration
aminic phosphate polymer		eye, mild skin irritation	20-30%
sodium metaborate octohydrate	CAS # 10555-76-7	Repr. 2; H361	<1%
* 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

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. Flush mouth with water. If conscious give water to further dilute chemical. Exhibits very low toxicity. Consult physician if adverse symptoms occur.
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 ₂ 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, oxides of nitrogen and phosphorus.
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. For personal protection, see Section 8.
6.2 Environmental precautions	Prevent further leakage or spillage, if safe to do so. Keep out of public sewers and waterways.
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.

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

SDS v1.1 | Date : 05/24/2016

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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.	Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

8.1	Control Parameters	No occupational exposure limits known.
	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 Use exhaust fans if necessary to control mist or vapor.
		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	1.11 - 1.15
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	13 - 20 cP
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 > 5000 mg/kg 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 data available.
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)	To the best of Flame Seal Products' current knowledge SMB has not been tested directly tested and is rated Repr, (2) due to it being in the same general chemical family as boric acid.
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 Toxicity reported for borates in humans: ingestion or absorption may cause nausea, vomiting, diarrhea, abdominal cramps, and erythematous lesions on the skin and mucous membranes. Other symptoms include: circulatory collapse, tachycardia, cyanosis, delirium, convulsions, and coma. Death has been reported to occur in infants from less than 5 grams and in adults from 5 to 20 grams. Liver – irregularities – Based on Human Evidence.

SECTION 12 ECOLOGICAL INFORMATION

12.1 Toxicity	No data available
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 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	Sodium Metaborate Octohydrate	CAS # 10555-76-7
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.
H361 : Repr. 2	Suspected of damaging fertility or the unborn child.

Hazard declaration not required on product label per Table 3.7.1, Note 3 of the GHS of Classification and Labeling of Chemicals – Fifth Revised Edition

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.

To the best of Flame Seal Products' current knowledge SMB has not been tested directly and is rated Repr. (2) due to it being in the same general chemical family as boric acid.

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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