

FORTRESS FR-100 SAFETY DATA SHEET

SECTION 1 Identification

Product Name: FORTRESS™ FR-100

Manufacturer: Fortress North America, LLC
4220 Duluth Ave. Suite A
Rocklin, CA 95765
Emergency Telephone Number: (530) 584-2522
Telephone Number for Information: (775) 225-9292



Recommended Use: Long-term fire retardant

SECTION 2 Hazard(s) Identification

Hazard Classification:

This material is non-hazardous under the criteria of OSHA Hazard Communication Standard 29CFR 1910.00

Signal Word(s): Warning

Hazard Statements: May cause skin irritation. May cause eye irritation. Inhalation of dust may cause respiratory irritation. Contains components suspected of causing cancer.

Pictograms:

Precautionary Statements: Prevention: Read SDS before use. Prevent release to environment. Avoid breathing dust. Do not eat, drink, or smoke when using this product. Use in well ventilated areas. Wear protective gloves/protective clothing/eye protection/face protection.

Description of other hazards: No data available

SECTION 3- Composition /Information on Ingredients

Composition of Mixture**	% w/w	CAS#
MgCl ₂ (Hexahydrate/Anhydrous)	80-99%	7786-30-3
FR-100 AddPack (performance additives)	0.5-5%	Trade Secret
Mg(OH) ₂	0.5-1%	1309-42-8
Mineral Oil	0.5-1%	8042-47-5
Pigments (mixture)	0.5-5%	Trade Secret

**Components are Company Trade Secret - Business Confidential. FRS North America, LLC 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

If swallowed: Rinse mouth. Do not induce vomiting.

If in eyes: Immediately flush eyes with water for several minutes, remove contacts if wearing, and then continue to rinse with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention without delay.

If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.

If inhaled: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if necessary.

Storage: Store dry location

Disposal: Dispose of contents and container according to local, state, and federal regulations.

SECTION 5 – Fire-Fighting Measures

Extinguishing Media:

Suitable extinguishing media: Carbon dioxide, dry-chemical or universal type foam

Special hazards arising from the substance: None

Hazardous combustion products: Hydrogen chloride may be generated

Special protective equipment and precautions for firefighters: Wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH-approved, and full protective gear. Use Carbon Dioxide Extinguisher (suitable for class B and C fires) or Multi-Purpose Dry Chemical Extinguisher (suitable for class A, B and C fires). Material will not burn.

SECTION 6 – Accidental Release Measures

Personal Precautions: Any/all persons dealing with the spill should wear appropriate personal protective equipment. Keep others away from spill/leak. Restrict access to area until the spill has been cleaned up.

Measures for Environmental Protection: Prevent release to environment.

Measures for Cleaning/Collecting: Sweep up and contain, dispose according to local, state, and federal regulations.

SECTION 7 – Handling and Storage

Handling: Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.

Storage: Store in dry place. Keep containers tightly closed when not in use.

SECTION 8 – Exposure Control

Exposure limits: Limits for mixture have not been established by OSHA and ACGIH

Exposure controls: Use outside or with proper ventilation. If good ventilation is not available, wear a respiratory device approved by NIOSH/MSHA for protection against dust.

Personal Protection:

Eye protection: Wear safety glasses with un-perforated side shields.

Skin protection: Wear chemical resistant gloves for long and repeated contact. Contaminated clothing and shoes should be cleaned before re-using.

Respiratory Protection: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines due to insufficient ventilation.

Other protective equipment: Safety shower/eye wash

General hygiene considerations: Acceptable industrial hygiene practices should be maintained.

SECTION 9 – Physical Properties

Appearance: Red powder with white crystals/flakes

Odor: mild to none

Odor threshold: Data currently unavailable

pH: 8-10

Melting point: 712°C

Boiling point: 1412°C

Vapor pressure: Data currently unavailable

Vapor density: Data currently unavailable

Evaporation rate: Data currently unavailable

Flash point: Data currently unavailable

Upper/lower flammability limit: Data currently unavailable

Solubility in water: >50g/100g @ 20°C

Other solubilities: Data currently unavailable

Log P (octanol – water): Data currently unavailable

Relative density: 2.3

Autoignition temperature: Will not burn.

Viscosity (centipoise @ 25°C): Data currently unavailable

Gibbs energy: Data currently unavailable

SECTION 10 – Stability and Reactivity

Reactivity: Data currently unavailable

Chemical stability: Stable under normal storage conditions
Conditions to avoid: Hygroscopic, keep dry.
Incompatible materials: Data currently unavailable
Hazardous decomposition products: Hydrogen chloride may be generated

SECTION 11 – Toxicological Information

Acute toxicity:

Acute oral toxicity: Low toxicity if swallowed.

LD₅₀, Rat, > 5,000 mg/kg

Acute dermal toxicity: Prolonged skin contact is unlikely to result in absorption of harmful amounts.

LD₅₀, Rabbit, > 2,020 mg/kg

Acute inhalation toxicity: At room temperature, exposure to vapor is minimal due to low volatility. Vapor from heated material may cause respiratory irritation and other effects. As product: The LC₅₀ has not been determined.

Skin Irritation: Prolonged contact may cause skin irritation with local redness. Symptoms may include pain, severe local redness, swelling, and tissue damage.

Serious eye damage/eye irritation: May cause severe eye irritation. May cause severe corneal injury.

Sensitization: For the major component(s): Skin contact may cause an allergic skin reaction in a small proportion of individuals.

Does not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure): Evaluation of available data suggests that this material is not an STOT-SE toxicant.

Specific Target Organ Systemic Toxicity (Repeated Exposure): Data currently unavailable

Carcinogenicity: Data currently unavailable

Teratogenicity: Data currently unavailable

Reproductive toxicity: Data currently unavailable

Mutagenicity: Data currently unavailable

Aspiration Hazard: Slightly irritating, avoid breathing dust.

SECTION 12 – Ecological Information

Ecotoxicity:

Acute aquatic toxicity: 96 hr rainbow trout LC₅₀: 1762 mg/L

Mobility: High

Biodegradation: No data for mixture.

Bioaccumulation: No data available for mixture.

SECTION 13 – Disposal

Dispose according to local, state, and federal regulations. Prevent release to environment.

SECTION 14 – Transportation

DOT: Not Regulated

TDG: Not Regulated

SECTION 15 – Regulatory Information

Non-regulated.

SECTION 16 – Other Information

Date Prepared: 07/10/2020

Disclaimer: The information provided in this SDS is believed to be correct and provided in good faith but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

