

Material Safety Data Sheet

R-19 Floor Repair Kit, Aluminum Oxide Aggregate

MSDS No. 9708.004

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Section 1 - Chemical Product and Company Identification

Product/Chemical Name: R-19 Floor Repair Kit, Aluminum Oxide Aggregate

Chemical Description: Aluminum oxide, fused

CAS Number: Mixture

Other Designations: Red, Black, White, Maroon

Component Names: Aluminum Oxide Aggregate

Manufacturer: Tufco International, Inc. - Gentry, AR 72734

HOURS 8:00 a.m. to 5:00 p.m. CST

Phone (800) 364-0836 Fax (479) 736-2947

24 HOUR: Chemtrec (800) 424-9300

HMIS

H 1

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PPE†

†Sec. 8

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	% wt or % vol
Aluminum oxide (Al ₂ O ₃)	1344-28-1	96.4
Titanium oxide (TiO ₂)	13463-67-7	2.7
Silicon dioxide (SiO ₂)	7631-86-9	0.5
Magnesium oxide (MgO)	1309-48-4	0.2
Iron oxide (Fe ₂ O ₃)	1039-37-1	0.1
Calcium oxide (CaO)	1305-78-8	0.1

Ingredient	OSHA PEL		ACGIH TLV		NIOSH REL		NIOSH IDLH
	TWA	STEL	TWA	STEL	TWA	STEL	
First Ingredient	15 mg/m ³ **	none estab.	10 mg/m ³	none estab.	none estab.	none estab.	none estab.
Second Ingredient	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Third Ingredient	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.	none estab.
Fourth Ingredient	15 mg/m ³ *	none estab.	10 mg/m ³	none estab.	10 mg/m ³	none estab.	none estab.
Fifth Ingredient	10 mg/m ³ *	none estab.	5 mg(Fe)/m ³	none estab.	5 mg(Fe)/m ³	none estab.	none estab.
Sixth Ingredient	5 mg/m ³	none estab.	2 mg/m ³	none estab.	2 mg/m ³	none estab.	none estab.

Additional Information: * Total dust or particulate ** 5 mg/m³ Respirable fraction

Section 3 - Physical and Chemical Properties

Physical State: Solid

Appearance and Odor: Various color / odorless

Odor Threshold: None established

Vapor Pressure: Not applicable

Vapor Density (Air=1): Not applicable

Formula Weight: Not applicable

Density: Not applicable

Specific Gravity (H₂O=1, at 4°C): 3.95

pH: Not applicable

Water Solubility: Insoluble

Other Solubilities: None

Boiling Point: Not applicable

Freezing/Melting Point: Not applicable

Viscosity: Not applicable

Refractive Index: Not applicable

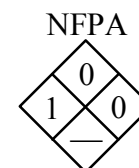
Surface Tension: Not applicable

% Volatile: Not applicable

Evaporation Rate: Not applicable

Section 4 - Fire-Fighting Measures

Flash Point: Non-flammable
Flash Point Method: Not applicable
Burning Rate: Not applicable
Autoignition Temperature: Not applicable
LEL: Not applicable
UEL: Not applicable
Flammability Classification: 0
Extinguishing Media: Not applicable
Unusual Fire or Explosion Hazards: None
Hazardous Combustion Products: None
Fire-Fighting Instructions: None
Fire-Fighting Equipment: Not applicable

**Section 5 - Stability and Reactivity**

Stability: R-19 Floor Repair Kit, Aluminum Oxide Aggregate is stable under all conditions.
Polymerization: Hazardous polymerization cannot occur.
Chemical Incompatibilities: Dissolves in hydrofluoric acid. Incompatible with hot chlorinated rubber.
Conditions to Avoid: None
Hazardous Decomposition Products: None

Section 6 - Health Hazard Information**Potential Health Effects**

Primary Entry Routes: Inhalation
Target Organs: Respiratory system
Acute Effects
Inhalation: Single excessive exposure may cause irritation in nose, throat and upper respiratory tract.
Eye: May cause slight transient (temporary) eye irritation. Remove in same manner as with any foreign object.
Skin: No known hazard.
Ingestion: No known hazard.
Carcinogenicity: IARC, NTP, and OSHA do not list the chemical components in R-19 Floor Repair, Kit Aluminum Oxide Aggregate as carcinogens.
Medical Conditions Aggravated by Long-Term Exposure: Pre-existing respiratory disorders may be aggravated by exposure to this product.
Chronic Effects: Repeated overexposure may cause or contribute to silicosis with symptoms including shortness of breath and persistent coughing.

Emergency and First Aid Procedures

Inhalation: Remove to fresh air if effects occur.
Eye Contact: Flush eyes with sufficient water to remove particles.
Skin Contact: No anticipated need for first aid.
Ingestion: Drink large quantity of water.
After first aid, get appropriate in-plant, paramedic, or community medical support.

Section 7 - Spill, Leak, and Disposal Procedures

Spill /Leak Procedures:
Small Spills: Cleanup using dustless procedures
Large Spills
Containment: Not applicable
Cleanup: Same as above. Product can be used as a cleanup material.
Regulatory Requirements: Follow applicable OSHA regulations (29 CFR 1910.120).
Disposal: Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state, and

local regulations.

Disposal Regulatory Requirements: For used or contaminated material, send to landfill, although additional evaluation is required to ensure compliance with all federal, state and local regulations. Check with appropriate authorities in your area for specific guidelines.

Container Cleaning and Disposal: Not applicable

EPA Regulations:

RCRA Hazardous Waste Number: Not listed (40 CFR 261.33)

RCRA Hazardous Waste Classification (40 CFR 261.): Not classified

CERCLA Hazardous Substance (40 CFR 302.4) unlisted specific per RCRA, Sec. 3001; CWA, Sec. 311 (b)(4); CWA, Sec. 307(a), CAA, Sec. 112

CERCLA Reportable Quantity (RQ), Not applicable

SARA 311/312 Codes: None

SARA Toxic Chemical (40 CFR 372.65): Not listed

SARA EHS (Extremely Hazardous Substance) (40 CFR 355): Not listed, Threshold Planning Quantity (TPQ)

OSHA Regulations:

Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-1-A): Not listed

OSHA Specifically Regulated Substance (29CFR 1910): Not listed

State Regulations: Check with appropriate authorities in your area.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls:

Ventilation: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

Administrative Controls:

Respiratory Protection: Avoid inhalation of dust. TLV respirable fraction 5 mg/m³. Use of a dust mask or NIOSH approved half-mask respirator is recommended. Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Protective Clothing/Equipment: Use of protective gloves is optional. Wear protective goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Safety Stations: Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Contaminated Equipment: Not applicable

Comments: Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 - Special Precautions and Comments

Handling Precautions: Use dustless procedures during handling, storage and cleanup. Practice good housekeeping. Maintain ventilation. Post warning to employees where product is used, stored or handled. If surfaces including this product are subjected to grinding, sanding or polishing, as might occur for maintenance or construction purposes, and such treatment produces respirable dust, then proper ventilation and appropriate NIOSH approved respirators should be worn.

Storage Requirements: No special requirements.

DOT Transportation Data (49 CFR 172.101):**Shipping Name:** Aluminum oxide**Hazard Class:** Not regulated**ID No.:** None**Packing Group:** None**Label:** None**Special Provisions:** None**Packaging Authorizations****a) Exceptions:** None**b) Non-bulk Packaging:** None**c) Bulk Packaging:** None**Quantity Limitations****a) Passenger, Aircraft, or Railcar:** None**b) Cargo Aircraft Only:** None**Vessel Stowage Requirements****a) Vessel Stowage:** None**b) Other:** None**Prepared By:** Brent E. Mills, Compliance Manager**Revision Notes:** Adopted ANSI 9 Part Format

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