

Material Safety Data Sheet

Acc. to OSHA and ANSI
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1 Identification of substance:

Product details:

Trade name: Fractalglue

Manufacturer/Supplier:

Manufacturer: Mattech Corporation
Address: P.O. Box 8502, Cincinnati, OH 45208
Phone: 513-237-7755
Emergency Phone: 513-237-7755
E-mail: info@buyrefractory.com
Website: www.buyrefractory.com

Emergency information:
Mattech Corporation

2 Composition/Data on components:

Chemical characterization:

Description:
aluminum oxide
aluminum hydroxide oxide
nitric acid
water

3 Hazards identification

Hazard description: • Not applicable
Information pertaining to particular dangers for man and environment
Not applicable

4 First aid measures

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.
After skin contact
Immediately wash with water and soap and rinse thoroughly.

Seek immediate medical advice.

After eye contact

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Seek medical treatment.

5 Fire fighting measures

Suitable extinguishing agents

Product is not flammable. Use fire fighting measures that suit the surrounding fire.

Protective equipment:

Wear self-contained respirator.

Wear fully protective impervious suit.

6 Accidental release measures

Person-related safety precautions:

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Measures for environmental protection:

Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Additional information:

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

Handling

Information for safe handling:

Keep container tightly sealed.

Store in cool, dry place in tightly closed containers.

No special precautions are necessary if used correctly.

Information about protection against explosions and fires:

No special measures required.

Storage

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility: Not required.

Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

Additional information about design of technical systems:

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace:

Aluminum oxide mg/m³

ACGIH TLV	10; A4
Belgium TWA	10
Denmark	10
France TWA	10
Germany TWA	1.5 (respirable fraction of the aerosol)
Ireland TWA	5 (respirable dust) 10 (total inhalable dust)
Netherlands TWA	10 (inhalable)
Russia TWA	4-STEL
Switzerland TWA	6
OSHA PEL	5 (respirable fraction) 15 (total dust)

Nitric acid ppm

ACGIH TLV	2; 4-STEL
Belgium TWA	2; 4-STEL
France TWA	2; 4-STEL
Germany TWA	10
Netherlands TWA	2
Switzerland TWA	2; 4-STEL
United Kingdom TWA	2; 4-STEL
Russia TWA	2-STEL
Denmark	2
Finland	2; 5-STEL
Hungary TWA	5 mg/m ³ -STEL
Poland TWA	10 mg/m ³
Ireland	2; 4-STEL
Sweden	2; 5-STEL
USA PEL	2

Additional information: No data

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Breathing equipment:

Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves

Eye protection: Safety glasses

Body protection: Protective work clothing.

9 Physical and chemical properties:

Form: Paste

Color: White

Odor: Not determined

	Value/Range	Unit	Method
Change in condition			
Melting point/Melting range:	Not determined		
Boiling point/Boiling range:	Not determined		
Sublimation temperature / start:	Not determined		

Flash point: Not applicable

Ignition temperature: Not determined

Decomposition temperature: Not determined

Danger of explosion:

Product does not present an explosion hazard.

Explosion limits:

Lower: Not determined

Upper: Not determined

Vapor pressure: Not determined

Density: Not determined

Solubility in / Miscibility with

Water: Fully miscible

10 Stability and reactivity

Thermal decomposition / conditions to be avoided:

Decomposition will not occur if used and stored according to specifications.

Materials to be avoided:

Aqueous solutions are incompatible with alkali and alkaline earth metals and many reactive organic and inorganic chemicals.

Dangerous reactions No dangerous reactions known

Dangerous products of decomposition: Nitrogen oxides

11 Toxicological information

Acute toxicity:

LD/Lc50 values that are relevant for classification:

ORL-HMN LDLo: 430 mg/kg (HNO₃)

UNR-MAN LDLo: 110 mg/kg (HNO₃)

Primary irritant effect:

on the eye: Irritating effect.

Sensitization: No sensitizing effects known.

Subacute to chronic toxicity:

Nitric acid causes burns on contact. Eye contact may cause blindness.

Vapors are irritating and cause upper respiratory irritation which may be severe. Corrosive to the teeth and digestive tract on ingestion.

Dilute solutions have reduced effects.

Subacute to chronic toxicity:

Aluminum oxide has caused tumors and neoplasms in experimental animals via implant.

Additional toxicological information:

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

12 Ecological information:

General notes:

Do not allow material to be released to the environment without proper governmental permits.

13 Disposal considerations

Product:

Recommendation

Consult state, local or national regulations for proper disposal.

Uncleaned packagings:

Recommendation:

Disposal must be made according to official regulations.

Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

Not a hazardous material for transportation.

DOT regulations:

Hazard class: None

Land transport ADR/RID (cross-border)

ADR/RID class: None

Maritime transport IMDG:

IMDG Class: None

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: None

Transport/Additional information:

Not dangerous according to the above specifications.

15 Regulations

Product related hazard informations:

Observe the general safety regulations when handling chemicals

National regulations

All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory.

Information about limitation of use:

For use only by technically qualified individuals.

16 Other information:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.