



SAFETY DATA SHEET

Following Regulation 1910.1200

SDS Number: 368 Date of first issue: 22 January 2019 Date of last revision: 21 February 2022

1 - Identification of product

a - Product identifier used on the label

Tradenames: Superwool Sealcoat XTRA

b - Other means of identification

The above-mentioned product contains Man-made Vitreous Fibre (MMVF)
REACH Registration number: 01-2119962882-26-0000

c - Recommended use of the chemical and restrictions on use

Liquid coating for refractories

d - Name, address, and telephone number

| |
|---|
| Morgan Advanced Materials P. O. Box 923; Dept. 300 Augusta, GA 30903-0923 Telephone: 706-796-4200 |
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e - Emergency Phone Number

For Product Stewardship and Emergency Information:
Hotline - 1-800-722-5681
Fax - 706-560-4054

For additional SDSs and to confirm this is the most current SDS for the product, visit our web page www.morganthermalceramics.com or send a request to MT.NorthAmerica@morganplc.com

2 - Hazard Identification

a - Classification of the chemical in accordance with paragraph (d) of §1910.1200

Not classifiable according to 2012 US Hazard Communication Standard (29CFR 1910.1200).

b - Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200

Not classifiable according to OSHA HCS 2012 (29CFR1910.1200).

Emergency Overview

c - Describe any hazards not otherwise classified that have been identified during the classification process

Mild mechanical irritation to skin, eyes and upper respiratory system may result from exposure.
These effects are usually temporary.

d - Mixture Rule

Not applicable.

3 - Composition / Information On Ingredients

a - Composition table

| COMPONENTS | CAS NUMBER | % BY WEIGHT |
|----------------------------|--|-------------|
| Alumina | 1344-28-1 | 35-50 |
| Water | 7732-18-5 | 20-40 |
| Potassium Alumino Silicate | N/A | 10-20 |
| Wool | (EU Index number 650-016- 00-2 Annex VI) | |
| Propylene Glycol | 57-55-6 | 0-5 |
| Amorphous Silica | 7631-86-9 | 5-10 |

b - Common Name

d - Impurities and Stabilizing Additives

4 - First-Aid measures

a - Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion

Eyes

If eyes become irritated, flush immediately with large amounts of lukewarm water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Do not rub eyes.

Skin

If skin becomes irritated, remove soiled clothing. Do not rub or scratch exposed skin. Wash area of contact thoroughly with soap and water. Using a skin cream or lotion after washing may be helpful.

Respiratory Tract

Remove affected person to clean fresh air. Drink water to clear throat, and blow nose to remove dust.

Gastrointestinal

If gastrointestinal tract irritation develops, move the person to a dust free environment.

c - Indication of immediate medical attention and special treatment needed, if necessary

Not Applicable.

5 - Fire-fighting measures

a - Suitable (and unsuitable) extinguishing media and

Use extinguishing media suitable for type of surrounding fire

c - Special Protective Equipment and Precautions for Firefighters

NFPA Codes: Flammability: 0 Health: 1 Reactivity: 0 Special: 0

b - Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products):

Non-combustible products, class of reaction to fire is zero. Packaging and surrounding materials may be combustible.

6 - Accidental Release Measures

a - Personal precautions, protective equipment, and emergency procedures

No specific environmental precautions required. Do not allow material to contaminate ground water system.

b - Methods and materials for containment and cleaning up

Take up with liquid-absorbing material (sand). Wash spillage site thoroughly with soap and water or detergent solution. Dispose of according to Federal, State and local governmental regulations.

7 - Handling and storage

a - Precautions for safe handling

Limit use of power tools unless in conjunction with local exhaust. Use hand tools whenever possible. Do not use compressed air for clean-up.

b - Conditions for safe storage, including any incompatibilities

Store in original factory container in a dry area. Keep container closed when not in use. Store at temperatures above 35°F to avoid irreversible precipitation of silica.

c - empty containers

Product packaging may contain residue. Do not reuse.

8 - Risk Management Measures / Exposures Controls / Personal Protection

a - OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available

| EXPOSURE GUIDELINES | | | |
|----------------------------------|--|----------------------|--------------------|
| MAJOR COMPONENT | OSHA PEL | ACGIH TLV | MANUFACTURER'S REG |
| Potassium Alumino Silicate Wools | None established | none established | 1 f/cc, 8-hr TWA |
| Aluminum Oxide | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust) | 10 mg/m ³ | NONE |
| Silica, Amorphous | (80 mg/m ³ + % SiO ₂) or 20 mppcf | 2mg/m ³ | NONE |

Industrial hygiene standards and occupational exposure limits vary between countries and local jurisdictions. Check which exposure levels apply to your facility and comply with local regulations. If no regulatory dust or other standards apply, a qualified industrial hygienist can assist with a specific workplace evaluation including recommendations for respiratory protection.

b - Appropriate Engineering Controls

Provide ventilation when product is being installed and under initial heating.

c - Individual protection measures, such as personal protective equipment

PPE - Skin

Wear rubber gloves and apron to prevent direct contact with skin.

PPE - Eye

Goggles/safety glasses with sideshields should be worn.

PPE – Respiratory

When engineering and/or administrative controls are insufficient to maintain workplace concentrations below the appropriate REG/PEL/REL, the use of appropriate respiratory protection, pursuant to the requirements of OSHA Standards 29 CFR 1910.134 and 29 CFR 1926.103, is recommended. A NIOSH certified respirator with a filter efficiency of at least 95% should be used. The 95% filter efficiency recommendation is based on NIOSH respirator selection logic sequence for exposure to particulates. Selection of filter efficiency (i.e. 95%, 99% or 99.97%) depends on how much filter leakage can be accepted and the concentration of airborne contaminants. Other factors to consider are the NIOSH filter series N, R or P. (N) Not resistant to oil, (R) Resistant to oil and (P) oil Proof. These recommendations are not designed to limit informed choices, provided that respiratory protection decisions comply with 29 CFR 1910.134. The evaluation of workplace hazards and the identification of appropriate respiratory protection is best performed, on a case by case basis, by a qualified industrial hygienist.

You may also refer to health and safety information on the HTIW Coalition website www.HTIWCoalition.org

9 - Physical and chemical properties

| | |
|--|----------------------------|
| a - Appearance | White putty-like substance |
| b - Odor | Not applicable |
| c - Odor Threshold | Not applicable |
| e - pH | Not applicable |
| d - Melting Point | 3000°F (1649°C) |
| f - Initial Boiling Point/Range | Not applicable |
| g - Flashpoint | Not applicable |
| h - Evaporation Rate | Not applicable |
| i - Flammability | Not applicable |
| j - Upper/Lower Flammability or Explosive Limits | Not applicable |
| k - VAPOR PRESSURE | Not applicable |
| l - VAPOR DENSITY | Not applicable |
| m - Solubility | Slight |
| n - Relative Density | Not applicable |
| o - Partition Coefficient: n-Octanol/water | Not applicable |
| p - Auto-ignition temperature | Not applicable |
| q - Decomposition Temperature | Not applicable |
| r - Viscosity | Not applicable |

10 - Stability and Reactivity

a - Reactivity

Stable under conditions of normal use.

b - Chemical Stability

Stable under conditions of normal use.

c - Possibility of Hazardous Reaction

None

d - Conditions to Avoid

Please refer to handling and storage advise in Section 7.

e - Incompatible Materials

This product is not reactive

f - Hazardous decomposition products

Upon heating above 1650° F (900° C) for sustained periods, this amorphous material begins to transform to mixtures of crystalline phases. Refer to Section 16 for additional information.

11 - Toxicological information

a - TOXICOKINETICS, METABOLISM AND DISTRIBUTION

b - Acute Toxicity

IRRITANT PROPERTIES

Superwool fibers are negative when tested using approved methods (Directive 67/548/EEC, Annex 5, Method B4). Like all man-made mineral fibers and some natural fibers, fibers contained in this product can produce a mild mechanical irritation resulting in temporary itching or rarely, in some sensitive individuals, in a slight temporary reddening. Unlike other irritant reactions, this is not the result of allergy or chemical skin damage but is caused by mechanical effects.

c - Epidemiology

No data available.

d - Toxicology

Exposure is predominantly by inhalation or ingestion. Man made vitreous fibers and AES fibers of a similar size to Superwool XTRA have not been shown to migrate from the lung and/or gut and do not become located in other organs of the body. PAS fibers contained in the products listed in the title have been designed to be rapidly cleared from lung tissue. This low biopersistence has been confirmed using EU protocol ECB/TM/27(rev7). When inhaled, even at very high doses, similar fibers do not accumulate to any level capable of producing a serious adverse biological effect.

International Agency for Research on Cancer and National Toxicology Program

12 - Ecological information

These products are not reported to have any ecotoxicity effects.

c - Bioaccumulative potential

No bioaccumulative potential.

d - Mobility in soil

No mobility in soil.

e - Other adverse effects (such as hazardous to the ozone layer)

No adverse effects of this material on the environment are anticipated.

13 - Disposal Considerations

Waste Management and Disposal

Unless wetted, such a waste is normally dusty and should therefore be properly sealed in containers for disposal. At some authorized disposal sites dusty waste may be treated differently, in order to ensure that they are dealt with promptly and to avoid them being windblown. Check for any national and/or regional regulations which may apply.

Additional information

This product, as manufactured, is not classified as a listed or characteristic hazardous waste according to U. S. Federal regulations (40 CFR 261). Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Under U. S. Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a "hazardous" waste. Check local, regional, state or provincial regulations to identify all applicable disposal requirements.

14 - Transport information

a - UN number.

Hazard Class: Not Regulated United Nations (UN) Number: Not Applicable
Labels: Not Applicable North America (NA) Number: Not Applicable
Placards: Not Applicable Bill of Lading: Product Name

b - UN proper shipping name

Not applicable.

c - Transport hazard class(es)

Not applicable.

d - Packing group, if applicable

Not applicable.

e - Environmental hazards (e.g., Marine pollutant (Yes/No))

No.

f - Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code)

Not regulated.

g - Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises

Not applicable.

International

INTERNATIONAL

Canadian TDG Hazard Class & PIN: Not regulated

Not classified as dangerous goods under ADR (road), RID (train), IATA (air) or IMDG (ship).

15 - Regulatory information

15.1 - United States Regulations

UNITED STATES REGULATIONS

SARA Title III: This product does not contain any substances reportable under Sections 302, 304, 313 (40 CFR 372). Sections 311 and 312 apply.
OSHA: Comply with Hazard Communication Standards 29 CFR 1910.1200 and 29 CFR 1926.59 and Respiratory Protection Standards 29 CFR 1910.134 and 29 CFR 1926.103.

TSCA: PAS wools are not required to be listed on the TSCA inventory.

CERCLA: PAS wools contain fibers with an average diameter greater than one micron and thus is not considered a CERCLA hazardous substance.

CAA: PAS wool contains fibers with an average diameter greater than one micron and thus is not considered a hazardous air pollutant.

States: PAS wools are not known to be regulated by any State. If in doubt, contact your local regulatory agency.

15.2 - International Regulations

INTERNATIONAL REGULATIONS

Canada WHMIS: No Canadian Workplace Hazardous Materials Information System categories apply to this product.

Canadian EPA: All substances in this product are listed, as required, on the Domestic Substance List (DSL).

European Union: These products are exonerated from any carcinogenic classification in the countries of the European Union under the provisions of Nota Q of the European Commission Directive 97/69/EC.

16 - Other Information

initial statement

Devitrification

When heated to temperatures in excess of 900°C (1650°F), PAS fibers will start to devitrify. This is common to all Man made vitreous fibers. During devitrification, PAS fibers do not form Crystalline Silica or any other crystalline phase which is classified as toxic to humans.

Product Stewardship Program

High concentrations of fibers and other dusts may be generated when after-service products are mechanically disturbed during removal. Therefore, ECFIA and HTIW Coalition recommend:

- Controlled measures are taken to reduce dust emissions and
- All personnel directly involved wear an appropriate respirator to minimize and comply with local regulatory limits.

For more information, call the Morgan Thermal Ceramics Product Stewardship Hotline (800-722-5681).

HMIS HAZARD RATING

HMIS Health: 1

HMIS Flammable: 0

HMIS Reactivity: 0

HMIS Personal Protective: To be determined by user

TECHNICAL DATA SHEETS

Revision Summary

Revision date updated.

MSDS prepared by

SDS Prepared By: MORGAN THERMAL CERAMICS ENVIRONMENTAL, HEALTH & SAFETY DEPARTMENT

Disclaimer

The information presented herein is presented in good faith and believed to be accurate as of the effective date of this Safety Data Sheet. Employers may use this SDS to supplement other information gathered by them in their efforts to assure the health and safety of their employees and the proper use of the product. This summary of the relevant data reflects professional judgment; employers should note that information perceived to be less relevant has not been included in this SDS. Therefore, given the summary nature of this document, Morgan Thermal Ceramics does not extend any warranty (expressed or implied), assume any responsibility, or make any representation regarding the completeness of this information or its suitability for the purposes envisioned by the user.

