



SAFETY DATA SHEET

Following Regulation 1910.1200

SDS Number: TR104 Date of first issue: 10 January 1991 Date of last revision: 21 February 2022

1 - Identification of product

a - Product identifier used on the label

Tradenames: Therm-O-Stix

b - Other means of identification

FIBROUS ADHESIVE

c - Recommended use of the chemical and restrictions on use

High Temperature Thermal Insulation

d - Name, address, and telephone number

Morgan Advanced Materials 115 E. Mound Street Girard, IL 62640 Telephone: 217-627-2101	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

Under OSHA HCS 2012, this product is classified as Category 2 skin & eyes irritant.

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

Hazard Pictograms



Hazard Statements

- Causes mild skin irritation
- Causes eye irritation
- May cause respiratory irritation
- May cause temporary irritation to exposed eyes, skin or respiratory tract.

Precaution Statements

- Do not handle until all safety instructions have been read and understood.
- Wear protective gloves, protective clothing, eye protection, and face protection.
- If concerned about exposure, get medical advice
- Dispose of waste in accordance with local, state and federal regulations.

Emergency Overview

Exposure to mist or vapor from this product may cause skin, eyes and respiratory tract irritation.

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

d - Mixture Rule

Not applicable.

3 - Composition / Information On Ingredients

a - Composition table

COMPONENTS	CAS NUMBER	% BY WEIGHT
Sodium Silicate	1344-09-8	40 – 45
Water	7732-18-5	40 – 45
Sodium Hydroxide	1310-73-2	5 – 10
Cellulose	9004-34-6	2 - 5

b - Common Name

(See Section 8 "Exposure Controls / Personal Protection" for exposure guidelines)

d - Impurities and Stabilizing Additives

Not applicable.

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

Flush with large amounts of water for at least 15 minutes. Do not rub eyes.

Skin

Wash with soap and water. If symptoms develop and persist, get medical attention.

Respiratory Tract

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

Gastrointestinal

Do not induce vomiting; drink plenty of water.

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

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

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

None

6 - Accidental Release Measures

a - Personal precautions, protective equipment, and emergency procedures

Small Quantities (less than 100 gall.): Mop up and flush to sewer with plenty of water.

Large Quantities (over 100 gall.): Isolate, dike and store discharged material, if possible. Otherwise disperse and flush with water. Observe environmental protection regulations.

b - Methods and materials for containment and cleaning up

Pick up large pieces and dispose in a closed container. Follow precaution stated in above section for clean up.

7 - Handling and storage

a - Precautions for safe handling

Follow all SDS/label precautions.

b - Conditions for safe storage, including any incompatibilities

This product is stable under all conditions of storage. Store in original factory container in a dry area. Keep container closed when not in use. Do not reuse the container.

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
Sodium Hydroxide	2mg/m ³	2mg/m ³ (ceiling)	NONE
Cellulose	15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)	10 mg/m ³	NONE

OTHER OCCUPATIONAL EXPOSURE LEVELS (OEL)
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

Use engineering controls, such as ventilation and dust collection devices, to reduce airborne particulate concentrations to the lowest attainable level.

c - Individual protection measures, such as personal protective equipment

PPE - Skin

Wear full body clothing, gloves, hat and eye protection.

PPE - Eye

As necessary, wear goggles or safety glasses with side shields.

PPE – Respiratory

When it is not possible or feasible to reduce airborne particulate, dust or vapor/mist levels below the PEL or REG through engineering controls, or until they are installed, employees are encouraged to use good work practices together with respiratory protection. Use NIOSH/MSHA approved particulate respirators, in compliance with OSHA Respiratory Protection Standard 29 CFR 1910.134 and 29 CFR 1926.103.

9 - Physical and chemical properties

a - Appearance	Solid, grey to white in color
b - Odor	Not applicable
c - Odor Threshold	Not applicable
e - pH	8 to 11
d - Melting Point	>2100°F
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	Weak
n - Relative Density	0.23 - 0.29
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

None.

b - Chemical Stability

Stable under conditions of normal use.

c - Possibility of Hazardous Reaction

None

d - Conditions to Avoid

None

e - Incompatible Materials

Acids (eventually heavy disintegration of the product).

f - Hazardous decomposition products

Flammable hydrogen gas may be produced on prolonged contact with aluminum, tin, lead, or zinc.

11 - Toxicological information

a - TOXICOKINETICS, METABOLISM AND DISTRIBUTION

b - Acute Toxicity

c - Epidemiology

d - Toxicology

Calcium Silicate - (CAS: 1344-95-2)

There are no reported health effects in humans or animals as a result of exposure to calcium silicate.

Calcium silicate is thus without long-term adverse health effects of exposures are kept under reasonable control.

Cellulose (CAS: 9004-34-6)

Inhalation of cellulose dust is not irritating or toxic in exposed humans if exposures are properly controlled. In industry, cellulose dust occurs in combination with other substances, such as quartz dust, wood, cotton, flax, jute, and hemp fibers, and these substances have demonstrated toxicities that are unrelated to their cellulose content.

International Agency for Research on Cancer and National Toxicology Program

Not applicable.

12 - Ecological information

No data available.

c - Bioaccumulative potential

No information for the product.

d - Mobility in soil

No information for the product.

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

To prevent waste materials from becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended. Comply with federal, state and local regulations.

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. Components of this product are considered to be hazardous as defined by the OSHA Hazard Communication Standard.
TSCA: All substances contained in this product are listed in the TSCA Chemical Inventory [Section 8(b)].

15.2 - International Regulations

INTERNATIONAL REGULATIONS

Canadian WHMIS: Not applicable

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

16 - Other Information

initial statement

Devitrification

Product Stewardship Program

Morgan Thermal Ceramics www.morganthermalceramics.com

HMIS HAZARD RATING

TECHNICAL DATA SHEETS

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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.