



SAFETY DATA SHEET

Following Regulation 1910.1200

SDS Number: 266 Date of first issue: 23 April 1996 Date of last revision: 21 February 2022

1 - Identification of product

a - Product identifier used on the label

Tradenames: 400 Grade: 400 LS Grade Paper

b - Other means of identification

SVF PAPER

c - Recommended use of the chemical and restrictions on use

High Temperature Gasket, Heat Shield, Liner

d - Name, address, and telephone number

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

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

Dust and respirable fibers from this product may aggravate existing chronic lung conditions such as bronchitis, emphysema and asthma.

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

<u>COMPONENTS</u>		<u>CAS NUMBER</u>	<u>% BY WEIGHT</u>
Latex	Mineral Wool	65997-17-3	90 – 95
		NONE	5 – 10

b - Common Name

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

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

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

Skin

Wash affected area gently with soap and water. 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

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

Avoid creating airborne dust. Follow routine housekeeping procedures. Vacuum only with HEPA filtered equipment. If sweeping is necessary, use a dust suppressant and place material in closed containers. Do not use compressed air for clean-up. Personnel should wear gloves, goggles and approved respirator.

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

Store in original factory container in a dry area. Keep container closed when not in use. Store at temperatures between 40 - 100°F.

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
Mineral Wool	Not Established	1 f/cc	1 f/cc
NOTES: Recommended exposure guideline (REG) for respirable fibers as an 8 hour time weighted average (TWA) exposure, based on air samples collected and analyzed using NIOSH method 7400(B). Trace amount of formaldehyde may release from latex during initial heating of this product. The current OSHA PELs for formaldehyde are: 0.75 ppm (8 hr.TWA) and 2 ppm (STEL). OTHER OCCUPATIONAL EXPOSURE LEVELS (OEL) Ontario Canada OEL - Mineral wools = 1 f/cc. 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 loose fitting, long sleeve shirt and pants.

PPE - Eye

Goggles/safety glasses with sideshields should be worn.

PPE – Respiratory

When it is not possible or feasible to reduce airborne fiber and dust levels below the PEL,OEL or REG through engineering controls, or until they are installed, employees are encouraged to use good work practices together with respiratory protection. Before providing respirators to employees (especially negative pressure type), employers should: 1) monitor for airborne dust concentrations using appropriate NIOSH analytical methods and select the respiratory protection based upon the results of that monitoring , 2) have the workers evaluated by a physician to determine the workers' ability to wear respirators, and 3) implement respiratory protection training programs. Use NIOSH/MSHA approved respirators, in compliance with OSHA Respiratory Protection Standard 29 CFR 1910.134 and 29 CFR 1926.103, for the particular hazard or airborne concentrations to be encountered in the work environment.

9 - Physical and chemical properties

a - Appearance	White to gray fibrous material
b - Odor	Not applicable
c - Odor Threshold	Not applicable
e - pH	Not applicable
d - Melting Point	Approximately 2200°F (1200°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	Negligible
n - Relative Density	2.7 - 2.9
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

Hydrofluoric acid, phosphoric acid, strong alkalis

f - Hazardous decomposition products

Decomposition of the latex binder will occur at temperatures above 200°C releasing smoke, water, carbon monoxide, carbon dioxide and hydrocarbons. The duration and the amount of release will depend upon the applied temperature, the thickness and area of the material and binder content. During the first heating cycles increased ventilation or the use of suitable respirator protection may be required.

11 - Toxicological information

a - TOXICOKINETICS, METABOLISM AND DISTRIBUTION

In October 2001, an international expert review was conducted by the International Agency for Research on Cancer (IARC), downgrading the classification of mineral wool from Group 2B (possible carcinogen) to Group 3 (not classifiable as to carcinogenicity in humans). IARC noted specifically:

"Epidemiologic studies published during the 15 years since the previous IARC Monographs review of these fibers in 1988 provide no evidence of increased risks of lung cancer or mesothelioma (cancer of the lining on the body cavities) from occupational exposures during manufacture of these materials, and inadequate evidence overall of any cancer risk."

The IARC downgrade is consistent with the conclusion reached by the U.S. National Academy of Sciences, which in 2000 found "no significant association between fiber exposure and lung cancer or nonmalignant respiratory disease in the MVF [man-made vitreous fiber] manufacturing environment."

b - Acute Toxicity

c - Epidemiology

d - Toxicology

Mineral wool: Inhalation of a high dose of mineral (rock) wool in an animal study showed nonspecific inflammatory lesions and fibrosis in the lungs of exposed rats. No significant increase of carcinogenic activity was observed in the same study.

To obtain more epidemiology or toxicology information, please call the toll free telephone number for the Thermal Ceramics Product Stewardship Program found in Section 16 - Other Information.

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

To prevent waste materials becoming airborne, a covered container or plastic bagging is recommended. Comply with federal, state and local regulations. Method of disposal: Landfill. Chemical additions, processing or otherwise altering this material may make the waste management information presented in this MSDS incomplete, inaccurate, or otherwise inappropriate.

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

EPA: This product does not contain any substances reportable under Sections 302, 304, 313 (40 CFR 372). Sections 311 and 312 apply. All substances contained in this product are listed in the TSCA Chemical Inventory [Section 8(b)].

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.

California: According to our raw material supplier, latex used in this product contains small amounts of the following chemicals listed in Proposition 65, Safety Drinking Water and Toxic Enforcement Act of 1986 as chemical(s) known to the state of California to cause cancer:

-Formaldehyde CAS No. 50-00-0
-Acrylamide CAS No. 79-06-1
-Ethyl Acrylate CAS No. 140-88-5

Also, ceramic fibers (airborne particles of respirable size) are listed in the State of California as a chemical known to cause cancer.

15.2 - International Regulations

INTERNATIONAL REGULATIONS

Canada 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

Trace amounts of formaldehyde, acrylonitrile may be released from latex polymer during initial heating. Under normal conditions of handling, processing and use it is reasonable to expect the amount of acrylonitrile released to be below 1.0 ppm. Consult OSHA Standards on acrylonitrile and formaldehyde (29 CFR 1910.1045 and 29 CFR 1910.1048 respectively) for specific requirements if the exposure level is beyond the threshold levels.

Devitrification

Product Stewardship Program

Morgan Thermal Ceramics www.morganthermalceramics.com

HMIS HAZARD RATING

HMIS Acute Health: 0

HMIS Flammable: 0

HMIS Reactivity: 0

HMIS Personal Protective: To be determined by user

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.