



Tuff-Stuff® MS

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 12/10/2024

Date of Issue: 10/14/2021

Version: 4.1

SECTION 1: IDENTIFICATION

Product Identifier

Product Form: Paste

Product Name: Tuff-Stuff® MS

Product Code: 2130

Intended Use of the Product

Sealant

Name, Address, and Telephone of the Responsible Party

Manufacturer

The Garland Company, Inc.
3800 East 91st Street
Cleveland, Ohio 44105-2197
T-800-762-8225
F-216-641-0633
www.garlandco.com

Supplier

The Garland Company, Inc.
3800 East 91st Street
Cleveland, Ohio 44105-2197
T-800-762-8225
F-216-641-0633
www.garlandco.com

The Garland Company, Inc.
209 Carrier Drive
Toronto, Ontario M9W 5Y8
T-416-747-7995 ; 800-387-5991
F-416-747-1980

Emergency Telephone Number

Emergency Number: 1-800-262-8200 (CHEMTREC)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Eye Irrit. 2A	H319
Skin sens. 1	H317
Repr. 1B	H360

Disclaimer: ATTENTION! Some of the additives disclosed in Section 3 such as Carbon Black and or Titanium Dioxide are regulated by California Proposition 65 as carcinogens when they are in the form of “airborne, unbound particles of respirable size.” Since the disclosed materials are bound in the polymer matrix, they will not be available as an airborne hazard (dust, mist, or spray) under normal conditions of use. Therefore, this product does not present a respiration hazard as outlined by the Prop 65 regulations.

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US)



Signal Word (GHS-US)

: Danger

Hazard Statements (GHS-US)

: H319 – Causes serious eye irritation.
H317 – May cause an allergic skin reaction.
H360 – May damage fertility or the unborn child.

Precautionary Statements (GHS-US)

: P201 – Obtain special instructions before use.
P202 – Do not handle until all safety precautions have been read and understood.
P261 – Avoid breathing vapor/spray.
P272– Contaminated work clothing should not be allowed out of the workplace.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 – If on skin: Wash with plenty of water.
P305+P351+P338 – If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 – If exposed or concerned: Get medical advice/attention.
P321 – Specific treatment (see medical advice on this label).
P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 – If eye irritation persists: Get medical advice/attention.

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P362+P364 – Take off contaminated clothing and wash it before reuse.

P405 – Store locked up.

P501 – Dispose of contents/container in accordance with National regulations.

Other hazards: This product does not contain any substances classified as PBT or vPvB.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component

Name	Product Identifier	% (w/w)	Classification (GHS-US)
Proprietary Polymer	Proprietary	30-60%	Not classified
1,2 Benzene dicarboxylic acid, di-C8-C1 Branched alkyl ester, C9 rich	68515-48-0	10-30%	Repr. 1B, H360
Titanium Dioxide	13463-67-7	1-5%	Not classified
Limestone	1317-65-3	1-5%	Not classified
Proprietary Adhesion Promoter	Proprietary	1-5%	Not classified
Proprietary Catalyst	22673-19-4	<1%	Not classified
Carbon Black	1333-86-4	<1%	Carc. 2, H351 STOT RE 1, H372

Composition Comments: Exact concentrations and chemical identities of ingredients not listed above are either classified as non-hazardous or are withheld as a trade secret as covered by OSHA's Hazard Communication Standard, 29 CFR 1910.1200(i).

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Loosen tight clothing such as collar, tie, or belt. Get medical attention if symptoms are severe or persist.

Skin Contact: It is important to remove the substance from the skin immediately. In the event of any sensitization symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognized skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.

Eye Contact: Flush with large amounts of water for at least 15 minutes. Consult a physician if ill.

Ingestion: Rinse mouth thoroughly with water. Get medical attention/advice if you feel unwell. Do not induce vomiting unless under direction of medical personnel.

Most Important Symptoms and Effects Both Acute and Delayed

General: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation: Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.

Ingestion: May cause sensitization of allergic reactions in sensitive individuals. Prolonged or repeated exposure may cause the following adverse effects: Suspected of causing cancer.

Eye Contact: Irritating to eyes.

Indication of Immediate Medical Attention and Special Treatment Needed

Notes for the doctor: Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: This product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet as an extinguisher, as this will spread the fire.

Special Hazards Arising From the Substance or Mixture

Specific Hazards: Containers can burst or explode when heated, due to excessive pressure build up.

Hazardous Combustion Products: Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for Firefighters

Fire Fighting Procedures: Exercise caution when fighting any chemical fire.

Protection During Firefighting: Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. Cool containers exposed to heat with water spray to disperse vapors and protect those stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

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Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing includes helmets, protective boots, and gloves will provide a basic level of protection for chemical incidents.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use personal protection recommended in section 8. Avoid eye, skin and clothing contact. Do not walk or touch spilled material.

Environmental Precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

Methods and Materials for Containment and Cleaning Up

For Containment: Contain spilled material if possible. Absorb with materials such as: Dirt. Vermiculite. Sand.

Methods for Cleaning Up: Wear protective clothing as described in Section 8 of this safety data sheet. No action shall be taken without appropriate training or involving any personal risk. Do not touch or walk into spilled material. Avoid contact with skin and eyes.

Reference to Other Sections: For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

General Handling: Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink, and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Suspected of causing cancer. May damage fertility. May damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on General Occupational Hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse.

Conditions for Safe Storage

General: Store away from incompatible materials (see Section 10). Store locked up. Keep only in the original container. Keep container tightly closed in a cool, well ventilated place. Keep containers upright. Protect containers from damage. This product polymerizes when in contact with moisture.

Shelf Life: 6 Months at a storage temperature of 56 - 77°F (15 - 25°C).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

Proprietary Polymer		
USA ACGIH	ACGIH LTEL (TWA 8 hr ppm)	50 ppm
USA OSHA	OSHA LTEL (TWA 8hr ppm)	500 ppm
USA OSHA	OSHA LTEL (TWA 8 hr mg/m ³)	1800 mg/m ³
IDLH	IDLH (ppm)	1100 ppm

Titanium Dioxide (13463-67-7)		
USA ACGIH	ACGIH LTEL (TWA 8 hr mg/m ³)	10 mg/m ³ (A4)
USA OSHA	OSHA LTEL (TWA 8 hr mg/m ³)	15 total dust
IDLH	IDLH (mg/m ³)	5000 mg/m ³

Limestone (1317-65-3)		
USA OSHA	OSHA LTEL (TWA 8hr mg/m ³)	5 mg/m ³ respirable fraction
USA OSHA	OSHA LTEL (TWA 8 hr mg/m ³)	15 mg/m ³ total dust

Proprietary Catalyst (22673-19-4)		
USA ACGIH	ACGIH LTEL (TWA 8 hr mg/m ³)	0.1 mg/m ³

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USA ACGIH	ACGIH STEL (15 min mg/m ³)	0.2 mg/m ³
USA OSHA	OSHA (TWA 8 hr mg/m ³)	0.1 mg/m ³

Carbon Black (1333-86-4)		
USA ACGIH	ACGIH LTEL (TWA 8 hr mg/m ³)	3 mg/m ³ inhalable fraction (A3)
USA OSHA	OSHA LTEL (TWA 8 hr mg/m ³)	3.5 mg/m ³
IDLH	IDLH (mg/m ³)	1750 mg/m ³

ACGIH = American Conference of Governmental Industrial Hygienists

OSHA = Occupational Safety and Health Administration

A4 = Not classifiable as a human carcinogen.

A3 = Confirmed animal carcinogen with unknown relevance to humans.

A2 = Suspected human carcinogen.

Appropriate Engineering Controls: Provide adequate general and local exhaust ventilation. Ensure the ventilation system is regularly maintained and tested. Good general ventilation should be adequate to control worker exposure to airborne contaminants. Observe any occupational exposure limits for the product or ingredients.

Personal Protective Equipment: Protective goggles. Gloves.



Hand Protection: Wear protective gloves. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resistant degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Eye/Face Protection: Wear safety glasses or goggles to avoid eye contact. If inhalation hazards exist, a full face respirator may be required instead.

Skin Protection: Wear impervious gloves such as vinyl to minimize contact with skin.

Hygiene Measures: Wash after use and before eating, smoking, and using the toilet. Do not eat, drink, or smoke when using this product.

Respiratory Protection: In the event of an inhalation hazard, ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental Exposure Controls: Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Paste
Color	:	Various
Odor	:	Characteristic
Flammability Limits in Air	:	Not available
Vapor Pressure	:	< 1
Vapor Density (Air = 1)	:	> 1
Specific Gravity (H ₂ O = 1)	:	1.39
Solubility in Water (by wt)	:	Insoluble
Density	:	11.6 lbs/gal.
Explosive Properties	:	Not explosive
VOC (EPA METHOD 24)	:	<50 g/L

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SECTION 10: STABILITY AND REACTIVITY

Reactivity: This product polymerizes when in contact with moisture.

Chemical Stability: Stable under recommended storage conditions. See Storage, Section 7.

Possibility of Hazardous Reactions: No potentially hazardous reactions known.

Conditions to Avoid: None known.

Incompatible Materials: None known.

Hazardous Decomposition Products: Does not decompose when used and stored as recommended. Thermal decomposition may produce harmful gases or vapors.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on Toxicological Effects – Product

Acute Toxicity: Not classified.

LD50 and LC50 Data: Not available.

Skin Corrosion/Irritation: Not available.

Serious Eye Damage/Irritation: Causes eye irritation.

Respiratory or Skin Sensitization: Causes skin irritation.

Germ Cell Mutagenicity: No data available.

Teratogenicity: No data available.

Carcinogenicity: Contains a substance which may cause cancer by inhalation. IARC Group 2B possibly carcinogenic to humans.

Specific Target Organ Toxicity (Repeated Exposure): Not classified.

Reproductive Toxicity: No relevant data found.

Specific Target Organ Toxicity (Single Exposure): Not classified.

Aspiration Hazard: May be fatal if swallowed and enters airways.

Symptoms/Injuries After Inhalation: May be fatal if swallowed and enters airways.

Information on Toxicological Effects – Ingredient(s)

LD50 and LC50 Data:

Titanium Dioxide (13463-67-7)	
LD50, Rat	> 10,000 mg/kg
LD50, Dermal Rabbit	> 10,000 mg/kg

Carbon Black (133-86-4)	
LD50, Rat (Ingestion/Oral)	> 15,400 mg/kg
LD50, Dermal Rabbit	> 13 g/kg

Crystalline Silica (14808-60-7)	
TCLo, Human (Inhalation, 8 hr, 17.9 yr, Intermittent)	16 mppcf
LD50, Dermal Rabbit	Not available

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Aquatic Chronic 3 – H412 Harmful to aquatic life with long lasting effects.

Persistence and Degradability

No known applicable information.

Mobility in Soil

Mobility in Soil: In the aquatic and terrestrial environment, movement is expected to be limited.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Waste generation should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Unused and Contaminated Product: Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning

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materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: TRANSPORT INFORMATION

14.1 In Accordance with DOT

Proper Shipping Name : Not Regulated
Hazard Class :
Identification Number :
Packing Group :

14.2 In Accordance with IMDG

Proper Shipping Name : Not Regulated
Hazard Class :
Identification Number :
Packing Group :

14.3 In Accordance with IATA

Proper Shipping Name : Not Regulated
Hazard Class :
Identification Number :
Packing Group :

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

OSHA 29 CFR 1910-1200 – Irritant.

TSCA – All components of this product are listed on TSCA Inventory.

CERCLA Reportable Quantity – Not applicable

SARA Title III: Section 302 Extremely Hazardous Substances – None

Section 304 – Not applicable.

Section 311/312 – Immediate (acute) health hazard.

Section 313 – None

RCRA – Refer to section 13.

Titanium Dioxide (13463-67-7)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	No

Note: The form of Titanium Dioxide in the product does not match the requirements for prop 65 – “Airborne unbound particles of respirable size”.

Carbon Black (133-86-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	No

Note: The form of Carbon Black in the product does not match the requirements for prop 65 – “Airborne unbound particles of respirable size”.

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Crystalline Silica (133-86-4)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	No significance risk level (NSRL)
Yes	No	No	No	No

Note: The form of Carbon Black in the product does not match the requirements for prop 65 – “Airborne unbound particles of respirable size”.

Titanium Dioxide (13463-67-7)
U.S. – Massachusetts – RTK, U.S. – Rhode Island - Right to Know Hazardous Substance List, U.S. – New Jersey – RTK, U.S. - Pennsylvania - RTK (Right to Know) List, U.S. – Minnesota - RTK

Limestone (1317-65-3)
U.S. – Massachusetts – RTK, U.S. – New Jersey – RTK, U.S. - Pennsylvania - RTK (Right to Know) List, U.S. – Rhode Island – RTK, U.S. – Minnesota - RTK

Carbon Black (1333-86-4)
U.S. – Massachusetts – RTK, U.S. – New Jersey - Right to Know Hazardous Substance List, U.S. – New Jersey – RTK, U.S. - Pennsylvania - RTK (Right to Know) List, U.S. – Rhode Island – RTK, U.S. – Minnesota – RTK

Crystalline Silica (14808-60-7)
U.S. – Massachusetts – RTK, U.S. – New Jersey - RTK, U.S. – Rhode Island – RTK, U.S. - Pennsylvania - RTK (Right to Know) List, U.S. – Minnesota - RTK

SECTION 16: OTHER INFORMATION

Revision Date	: 12/10/2024
Other Information	: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.
Party Responsible for the Preparation of This Document	: The Garland Company, Inc. 3800 East 91 st Street Cleveland, Ohio 44105-2197 T-1800-762-8225 F-216-641-0633

This information is based on our knowledge as of the Revision Date and is intended to describe the product only for the purposes of health, safety and environmental requirements as of the Revision Date. It should not therefore be construed as guaranteeing any specific property of the product nor as providing any warranty, expressed or implied. The user assumes all responsibility, liability, risk of loss, damage, or expense arising out of, or in any way connected with, the handling, storage, use, or disposal of the product.