

FORTRESS®

EPA Registration Number: 59807-19

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product identifier

Trade name : Fortress®
 Product type : Herbicide
 EPA Registration No. : 59807-19

Active Ingredient : Isoxaben + Dithiopyr

Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Herbicide
 Uses advised against : No information available

Details of the supplier of the safety data sheet

Company information : OHP, Inc.
 PO Box 746
 Bluffton, SC 29910-0746

Phone Number : (800) 659-6745

Emergency telephone numbers

TRANSPORTATION EMERGENCY

(24 hours a day) call : Chemtrec: 1-800-424-9300

MEDICAL EMERGENCY (24 hours a day) and Product Information call : 1-800-356-4647

SDS Information

or Request : ohp.com

2. HAZARDS IDENTIFICATION

Signal word : DANGER

Symbol(s) :



Hazard statement(s) : Carcinogenicity, Cat. 1:
 H350: May cause cancer by inhalation.
 STOT Cat 2: H372: Causes damage to lungs through prolonged or repeated exposure by inhalation.

Precautionary Statement(s) :

- P202 Do not handle until all safety precautions have been read and understood.
- P260 Do not breathe dust.
- P264 Wash thoroughly after handling
- P280 Wear protective gloves and clothing.
- P270 Do not eat, drink or smoke when using this product.

P308 + P313 IF exposed or concerned: Get medical advice/attention.
 P501 Dispose of contents/container in accordance with all local and national regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Component(s)	CAS number	Concentration
Bentonite	1302-78-9	85-95%
Quartz (crystalline silica) (respirable <1%)	14808-60-7	0-1%

Non-Hazardous Component(s) *	CAS number	Concentration
Isoxaben	82558-50-7	0.5%
Dithiopyr	97886-45-8	0.25%

* Does not meet the definition of hazardous under Regulation §1910.1200

4. FIRST AID MEASURES

Inhalation : Move to fresh air. If irritation or other symptoms occur, get medical attention.

Skin contact : No first aid should be needed.

Eye contact : Immediately flush eyes with cool running water, lifting upper and lower lids. If irritation persists or for foreign body in the eye, get medical attention.

Ingestion : If used material is ingested, get medical attention due to possibility of chemical contamination. If large amount of unused material is swallowed, get immediate medical attention.

Most important symptoms/effects, acute and delayed : Eye contact may cause mechanical irritation and possible eye injury. May cause mechanical skin and respiratory irritation. This product contains <1% respirable crystalline silica. May cause cancer if respirable dust is inhaled over prolonged periods. This product contains crystalline silica. Inhalation of respirable crystalline silica may cause lung disease, silicosis with symptoms of shortness of breath and cough.

Indication of immediate medical attention and special treatment needed, if necessary : No immediate medical attention is required.

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5. FIRE FIGHTING MEASURES

Suitable (and unsuitable)

extinguishing media : Use media that is appropriate for surrounding fire; unused product is not combustible.

Specific hazards arising from the chemical (e.g., nature of any hazardous

combustion products) : No hazardous combustion products known.

Special protective equipment and precautions

for fire-fighters : Firefighters should always wear self-contained breathing apparatus and full protective clothing for fires involving chemicals or in confined spaces.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

: No special equipment is generally required for spill clean-up. For dusty conditions, an approved respirator may be needed. Refer to Section 8 for additional information.

Environmental Hazards : Report releases as required by local and federal regulations.

Methods and material for containment and cleaning up

: Sweep up and collect unused material for re-use or disposal. For dusty conditions, an approved respirator may be needed. Refer to Section 8 for additional information.

7. HANDLING AND STORAGE

Precautions for safe handling

: Avoid breathing dust. Avoid contact with eyes, skin, and clothing. Wash thoroughly with soap and water after use. If clothing becomes dusty, launder before re-use. Use only with adequate ventilation. Minimize the generation and accumulation of dust. Follow good housekeeping practices to keep surfaces, including areas overhead such as piping, drop ceilings, ductwork, etc. free from settled dust. Dry powders can build static electricity charges when subjected to friction of transfer and in mixing operations.

Conditions for safe storage, including

any incompatibilities : Store in a dry area. Keep away from turpentine, hydrofluoric acid, vegetable oil, and other unsaturated organic compounds (such as fish oil), as this may generate heat and/or fire.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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.

Chemical Name	Exposure Limits
Bentonite	15 mg/m3 PEL-TWA (total dust), 5 mg/m3 PEL-TWA (respirable dust)
Quartz (crystalline silica) (Respirable <1%)	30 mg/m8 / %SiO2+2 (total dust) TWA OSHA PEL 10 mg/m3 / %SiO2+2 (respirable dust) TWA OSHA PEL 0.025 mg/m3 (respirable dust) TWA ACGIH TLV

Appropriate engineering

controls : General ventilation is adequate for normal use. If handling produces airborne dust, local exhaust ventilation may be needed.

Individual protection measures, such as personal protective equipment

Eye Protection: Safety glasses or goggles if needed to prevent eye contact.

Skin Protection: None required for normal use.

Respiratory Protection: None required for normal use. For operations where the dust concentration may be excessive, a dust respirator may be used. Follow OSHA regulations in the selection and use of respiratory protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state,

color, etc.) : Gray to Tan to Red Granular Solid

Odor : Not applicable

Odor threshold : No applicable information available

pH : No applicable information available

Melting point/

freezing point : No applicable information available

Initial boiling point

and boiling range : No applicable information available

FORTRESS®

EPA Registration Number: 59807-19

Flash point: No applicable information available

Evaporation rate: No applicable information available

Flammability (solid, gas): No applicable information available

Upper/lower flammability or explosive limits: No applicable information available

Vapor pressure: No applicable information available

Vapor density: No applicable information available

Relative density: 2.2

Solubility(ies): Insoluble

Partition coefficient: n-octanol/water: No applicable information available

Auto-ignition temperature: No applicable information available

Decomposition temperature: No applicable information available

Viscosity: No applicable information available

10. STABILITY AND REACTIVITY

Reactivity: This material is stable under normal conditions.

Chemical stability: This material is stable under normal conditions.

Possibility of hazardous reactions: Spontaneous combustion can occur when this product is used to absorb high concentrations of chemicals having a high heat of absorption such as olefins, hydrochloric acid, etc.

Conditions to avoid (e.g., static discharge, shock, or vibration): None known.

Incompatible materials: Turpentine, hydrofluoric acid, vegetable oil, fish oil, unsaturated organic compounds.

Hazardous decomposition products: None known.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Silica	Acute Oral Toxicity (LD50) oral, rat	22,500 mg/kg bw
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Inhalation: Inhalation of dust may cause irritation to the eyes, nose, throat and respiratory tract.

Skin contact: No known hazard.

Eye contact: Contact may cause mechanical, abrasive irritation with possible injury.

Ingestion: No known hazard.

Chronic Effects: Inhalation of excessive concentrations of any dust, including this material, may lead to lung injury. This product contains crystalline silica, in the form of quartz. Excessive inhalation of respirable crystalline silica may cause silicosis, a progressive, disabling and sometimes fatal disease of the lung. Symptoms may include cough, shortness of breath, wheezing and reduced pulmonary function.

Carcinogenicity: The International Agency for Research on Cancer (IARC), in Monograph IOOC has concluded that crystalline silica inhaled in the form of quartz is carcinogenic to humans (Group 1). Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs. The National Toxicology Program (NTP) classifies crystalline silica as a known carcinogen. Applications and exposure data indicate that exposure to respirable quartz in this product with normal use is well below the OSHA Permissible Exposure Limit (PEL) and ACGIH Threshold Limit Value (TLV). The manufacturer is not aware of any scientific or medical data available indicating that exposure to respirable crystalline silica from this product under conditions of normal use will cause silicosis or cancer. Adverse effects would not be expected from normal use of this product.

12. ECOLOGICAL INFORMATION

Ecotoxicity (aquatic and terrestrial, where available): No data available on the product. No adverse effects on the environment are expected
Silica: LC50 Fish (72h): Carp: >10,000 mg/L

Persistence and degradability: Bentonite and silica are non-degradable.

FORTRESS®**EPA Registration Number: 59807-19****Bioaccumulative potential** . . . : Not bioaccumulative.**Mobility in soil** : No data available.**Other adverse effects** : None currently known.**13. DISPOSAL CONSIDERATIONS**

Dispose in accordance with local, state and federal environmental Regulations. Unused material is suitable for disposal in sanitary landfill. Used material may be subject to regulation, depending on the nature of the material absorbed. Check with appropriate regulatory authority for used material containing hazardous waste.

14. TRANSPORT INFORMATION**UN number** : Not applicable**UN proper shipping name** . . . : Non-Classified**Transport hazard****class(es)** : Not applicable**Packing group** : Not applicable**Environmental hazards** : Not applicable**Special precautions****for user** : Not applicable**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** . . . : Not applicable**15. REGULATORY INFORMATION****TSCA** : All of the components of this product are listed on the TSCA Inventory or exempted from TSCA.**CERCLA** : This product is not subject to CERCLA release reporting. Many states have more stringent reporting requirements. Report releases as required by local and state regulations.**RCRA** : When a decision is made to discard this material as supplied, it does not meet RCRA's characteristic definition of ignitability, corrosivity, or reactivity and is not listed in 40 CFR §261.33.**SARA TITLE III 302** : Not listed**311/312 Hazard****Categories** : This product has been reviewed according to the EPA "Hazard Categories" and is categorized as a chronic health hazard (40 CFR §370.41).**313 Reportable****Ingredients** : This product does not contain any materials listed in Section 313 of the Superfund Amendment and Reauthorization Act of 1986 (40 CFR §372).**California Proposition 65** . . . : This product contains respirable crystalline silica which is known to the State of California to cause cancer.**16. OTHER INFORMATION, INCLUDING DATE OF REVISION OR LAST REVISION****Date of revision** : June 6, 2018**Disclaimer** : The information in this Safety Data Sheet relates to this specific material. It may not be valid for this material if used in combination with any other materials or in any process. It is the user's responsibility to satisfy themselves as to the suitability and completeness of this information for their own particular use. No warranty, expressed or implied, is made.**References** : Prepared in compliance with Regulation §1910.1200.