

Safety Data Sheet

According to 1907/2006/EC (REACH) and 1272/2008/EC (CLP)

Version: 1.1

Revision: 5/2/2022

Trade Name: JFS-450H™ High Performance Adhesive/Sealant

1 Identification of the substance/mixture and of the company/undertaking

Product identifier JFS-450H™ High Performance Adhesive/Sealant

Trade Name: JFS-450H™

Article No:

Details of the supplier of the Safety Data Sheet Manufacturer/Supplier:

Elite Crete Systems
1151 Transport Drive
Valparaiso, IN 46383
Toll Free: 888.323.4445
Tel: (219) 465-7671
elitecrete.com

Emergency telephone number:

CHEMTREC US DOMESTIC: (800-424-9300)
CHEMTREC INTERNATIONAL: (703-527-3887)
CANUTEC, CA DOMESTIC: (613-996-6666)

2 Hazards identification

Classification of the substance or mixture

GHS Classification in accordance with CFR 1910 (OSHA HCS)

Eye Irritation: - Category 2B

Acute Toxicity - Category 5

Label elements

Labeling according to Regulation (EC) No 1272/2008:

Hazard pictograms:

Signal Word: Warning



H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye injury.

H361d Suspected of damaging the unborn child.

P-Code Precautionary Statements.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing / eye protection.

P302 + P352 If on skin: Wash with plenty of soap and water.

P305 + P351 If in eyes: Rinse with water for several minutes.

P338 Remove contact lenses, if present and easy to do. Continue rinsing.

P501 Dispose of contents /container in accordance with local regulation.

Other hazards:

No data available

Hazard description:

Canadian WHMIS Classification: none listed

Safety Data Sheet

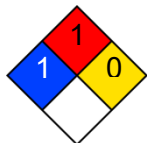
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NFPA ratings (scale 0 - 4)



Health = 1
Fire = 1
Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health	1
Fire	0
Reactivity	0

Health = 1
Fire = 0
Reactivity = 0

Other hazards not otherwise classified (HNOC) or not covered by GHS

None known

3 Composition/information on ingredients

Information On Ingredients:

CAS #	COMPONENT	PERCENT
1317-65-3	Calcium Carbonate	35 – 55%
1760-24-3	Amino Silane	0.5 – 5%
2768-02-7	Vinyltrimethoxysilane	0.5 – 5%
13463-67-7	Titanium Dioxide	4 – 10%
-----	Proprietary Polymers	15 – 30%

Hazardous Ingredient: Amino Silane & Vinyltrimethoxysilane.

4 First aid measures

Description of first aid measures

General Information: Get medical attention immediately if irritation or symptoms occur. Before seeking medical remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

After Inhalation: If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Consult a physician.

After Contact With The Skin: If contact with skin, immediately flush skin with plenty of water for at least 15 min. Wash with soap and water.

After Contact With Eyes: If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min. Consult a physician.

After Swallowing: For ingestion, if conscious, give no more than two glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids. Get medical attention immediately.

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5 Firefighting measures

Flammable Properties:

Flash Point.....: Not applicable
 Upper Flammable Limit.....: Not applicable
 Lower Flammable Limit (LEL).....: Not applicable
 Autoignition Temperature.....: Not applicable
 Sensitivity to Impact.....: Not applicable
 Sensitivity to Discharge.....: Not applicable

Method
 (solid)(ISO 2692)

Fire and Explosion Hazards:

Recommended Extinguishing Media: Water mist, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media: Sharp water jet.

Special Exposure Hazards Arising From The Substance Or Preparation Itself, Combustion Products, Resulting Gases: Hazardous decomposition products: carbon dioxide, carbon monoxide and incompletely burnt hydrocarbons.

Fire Fighting Procedures: Cool endangered containers with water. Fire fighters should wear full protective clothing including a self-contained breathing apparatus.

6 Accidental release measures

Precautions: Wear personal protection equipment (see section 8). Keep unprotected persons away. Avoid contact with eyes and skin. Avoid inhaling mists and vapors.

Containment: Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers. Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free number (800) 424-8802.

Methods For Cleaning Up: Do not flush away with water. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner. Exhaust vapors.

7 Handling and storage

Handling

Precautions For Safe Handling: Ensure adequate ventilation. Avoid contact with skin and eyes. Do not eat drink or smoke when using this product. Always wear protective clothing and eye protective equipment. Wash thoroughly after use.

Precautions Against Fire And Explosion: Product is not considered flammable under normal conditions, and product is not considered explosive.

Storage

Conditions For Storage Rooms And Vessels: Make sure there is no possibility of entering the ground.

Advice For Storage Of Incompatible Materials: Store in cool area.

Further Information For Storage: Protect against moisture. Store in original container only. Keep container tightly closed and store in a cool, well ventilated place.

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8 Exposure controls/personal protection

Engineering Controls

Ventilation: Use with adequate ventilation. Recommended.

Local Exhaust: In case of potential decomposition products: Local exhaust ventilation which meets the requirements of ANSI Z9.2 is recommended to control airborne containments at the point of use. (To maintain concentration below TLV).

Component Exposure Limits

MATERIAL	CAS #	TYPE	mg/m ³	DUST
Calcium Carbonate	1317-65-3	OSHA TWA	15 5	Total Respirable
Calcium Carbonate	1317-65-3	NIOSH	10 5	Total Respirable
Titanium Dioxide	13463-67-7	ACGIH TWA	10	-----
Titanium Dioxide	13463-67-7	OSHA	15	Total

Personal Protection Equipment (PPE)

Respiratory Protection: Respiratory protection is not normally required. A NIOSH approved air purifying respirator equipped with universal multi-containment, multi –gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur.

Hand Protection: Any liquid-tight rubber or vinyl rubber protective gloves.

Eye Protection: Safety glasses with side shields. Additional eye and face protection, splash-proof goggles, hood, full-faced respirator, or face shield is recommended if splashing occur.

Other Protective Clothing Or Equipment: Additional protective clothing or equipment is not normally required. Provide eye bath and safety shower.

General Hygiene And Protection Measures: Avoid contact with eyes, skin and clothing. Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Follow standard industrial hygiene practices when using this material. Wash thoroughly after handling.

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9 Physical and Chemical Properties

Appearance

Physical State/Form.....	Paste	METHOD
Color.....	Gray	(ISO 2592)
Odor.....	Slight odor	
Specific Gravity.....	1.66	

Safety Parameters

Melting Point/Melting Range.....: Not applicable
 Boiling Point/Boiling Range.....: Not applicable
 Flash Point.....: >200°C (>392°F)
 Ignition Temperature.....: Not determined
 Lower Explosion Limit (LEL).....: Not determined
 Vapor Pressure.....: < 1
 Vapor Density (Air=1).....: > 1
 Density.....: 12.29 lbs. / gallon
 Water Solubility/Miscibility.....: Not applicable
 pH-Value.....: Not applicable
 VOC Content.....: 18 grams per liter

10 Stability and reactivity

General Information: If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

Reactivity: No reactivity hazard is expected.

Chemical Stability: Stable at normal temperatures and pressure.

Conditions To Avoid: Avoid heat, flames and sparks. Avoid contact with incompatible materials.

Incompatible Materials: Strong acids, strong oxidizing materials.

Hazardous Decomposition Products: Upon decomposition, this product emits carbon monoxide, carbon dioxide and or low molecular weight hydrocarbons.

Hazardous Decomposition (Combustion): Upon decomposition, this product emits carbon monoxide, carbon dioxide and or low molecular weight hydrocarbons.

11 Toxicological information

Acute Toxicity

Product Details: Amino Silane (CAS # 1760-24-3)

Route of exposure	Result/Effect	Species/Test System	Source
Oral	LD50:>2000 mg/kg	Rat	Conclusion by analogy
Dermal	LD50:>2000 mg/kg	Rat	Conclusion by analogy

Acute Toxicity

Product Details: Vinyltrimethoxysilane (CAS # 2768-02-7)

Route of exposure	Result/Effect	Species/Test System	Source
Oral	LD50:>2000 mg/kg	Rat	Conclusion by analogy
Dermal	LD50:>2000 mg/kg	Rat	Conclusion by analogy

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Acute Toxicity

Product Details: Titanium Dioxide (CAS# 13463-67-7) Light & Neutral Colors Only.

Route of exposure	Result/Effect	Species/Test System	Source
Oral	LD50:>10000 mg/kg	Rat	Conclusion by analogy

Information On Likely Routes Of

Exposure Inhalation:

Assessment: No information available for this product. Maybe harmful if inhaled.

Ingestion:

Assessment: No information available for this product. May be harmful if ingested.

Skin Contact:

Assessment: May cause irritation of the skin.

Eye Contact:

Assessment: May cause irritation to eyes. Contact may cause tearing, redness and stinging or burning feeling, swelling and blurred vision.

Immediate Effects:

Assessment: Skin and eye irritation.

Delayed Effects:

Assessment: No information is available.

Medical Conditions Aggravated by Exposure:

Assessment: Skin and eye disorders

Respiratory Sensitization:

Assessment: For this endpoint no toxicological test data is available for the whole product.

Germ Cell Mutagenicity

Assessment: For this endpoint no toxicological test data is available for the whole product.

Carcinogenicity

Assessment: For this endpoint no toxicological test data is available for the whole product.

Reproductive Toxicity

Assessment: May damage fertility or the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment: For this endpoint no toxicological test data is available for the whole product.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: For this endpoint no toxicological test data is available for the whole product.

Aspiration Hazard

Assessment: Based on the physical – chemical properties of the product no aspiration hazard must be expected.

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12 Ecological information

Toxicity

Assessment:

Assessment based on ecotoxicological tests with similar products under consideration of the physical-chemical properties: For this product is acutely harmful for aquatic organisms. Do not discharge into environment without control. Product has not been tested. Statements on ecotoxicology derived from properties of individual components.

Persistence And Degradability

Assessment: No data known.

Bioaccumulative Potential

Assessment: No data known.

Mobility In Soil: Assessment:

No data known.

Other Adverse Effects: Assessment: No data known.

13 Disposal considerations

Product Disposal

Recommendation: Material that cannot be used, reprocessed or recycled should be disposed of in accordance with federal, state and local regulations at an approved facility. Depending on the regulations, waste treatment methods may include, e.g., landfill or incineration.

Packaging Disposal

Recommendation: Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

14 Transport information

US DOT & CANADA TDG SURFACE

Valuation.....: Not regulated for transport.

Transport by Sea IMDG-Code

Valuation.....: Not regulated for transport.

Air Transport ICAO-TI/IATA-DGR

Valuation.....: Not regulated for transport.

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15 Regulatory information

U.S. Federal Regulations

All of this products components are listed under the following:

- TSCA Inventory Status and TSCA Information:
- TSCA 12(b) Export Notification:
- CERCLA Regulated Chemicals: (40 CFR302.4)
- SARA 302 EHS Chemicals: (40 CFR 355 Appendix A)
- SARA 311/312 Hazard Class: (40 CFR 370.21)
- SARA 313 Chemicals: (40 CFR 372.65)

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

COMPONENT	CAS #	CA	MA	MN	NJ	PA
Calcium Carbonate	1317-65-3	No	Yes	Yes	Yes	Yes
Titanium Dioxide	13463-67-7	No	Yes	Yes	Yes	Yes

- **California Prop 65:** This product contains chemicals known to the State of California to cause cancer and, birth defects or other reproductive harm.

Details Of International Registration Status

South Korea (Republic of Korea)

ECL (Existing Chemicals list):

This product is listed in, or complies with, the substance inventory.

Australia

AICS (Australian Inventory of Chemical Substances):

This product is listed in, or complies with, the substance inventory.

Canada

DSL (Domestic Substance List):

This product is listed in, or complies with, the substance inventory.

Philippines

PICCS (Philippine Inventory of Chemicals and Chemical Substances): This product is listed in, or complies with, the substances inventory.

United States of America (USA)

TSCA (Toxic Substances Control Act Chemical Substances Inventory): This product is listed in, or complies with, the substances inventory.

European Economic Area (EEA)

REACH (Regulation (EC) No 1907/2006): General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section are fulfilled by the said supplier. The registration obligations for substances imported in the EEA by customers or the downstream users must be fulfilled by the latter.

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16 Other information

Abbreviations and acronyms:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation.
IATA: International Air Transport Association.
ACGIH: American Conference of Governmental Industrial Hygienists.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
CAS: Chemical Abstracts Service (division of the American Chemical Society).
NFPA: National Fire Protection Association (USA).
HMIS: Hazardous Materials Identification System (USA).
LC50: Lethal concentration, 50 percent.
LD50: Lethal dose, 50 percent.