

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade name: GraniteFX
General use: Silicone Glazing Sealant

Manufacturer Name

ACS International, Inc
4775 S Third Avenue
Tucson, AZ 85714

Emergency Information

Emergency Telephone: 520-889-1933
M-Th 7:00 to 4:30 pm (Mt Standard Time), F 7 to 11 am.

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	EIN No.	Weight %	ECC No.	Class	ACGIH TLV	OSHA PEL
Methyl tri(ethylmethylketoxime) silane	22984-54-9		3 – 7%				
Aminoethylaminopropyltrimethoxysilane	1760-24-3		1 – 5%				
Dimethyl siloxane, hydroxyl-terminated	70131-67-8		>60.0				
Polydimethylsiloxane	63148-62-9		15 – 40%				
Silica, amorphous	7631-86-9		7 – 13%				
Poly Chips® Granules*	---		10 – 15%				

*Components of the Poly Chips filler is a trade secrets and considered non-hazardous under OSHA 29 CFR 1910.1200. Non proprietary ingredients include alumina trihydrate (CAS: 21645-51-2) and less than 1% titanium dioxide (CAS: 13463-67-7).

3. HAZARDS IDENTIFICATION**Potential health effects**Acute Effects

Eyes: Direct contact may cause mild irritation.
Skin: May cause moderate irritation.
Inhalation: Irritates respiratory passages very slightly. Vapor overexposure may cause drowsiness.
Ingestion: Low ingestion hazard in normal use.

Prolonged/Repeated Exposure Effects

Skin: Repeated skin contact may cause allergic skin reaction.
Inhalation: Overexposure by inhalation may injure the following organ(s): Blood. Liver.
Ingestion: Repeated ingestion or swallowing large amounts may injure internally.

The above listed potential effects of overexposure are based on actual data, results of studies performed upon similar compositions, component data and/or expert review of the product. Please refer to Section 11 for the detailed toxicology information.

4. FIRST AID MEASURES

Skin: Remove from skin and immediately flush with water for 15 minutes. Get medical attention if irritation or ill effects develop or persist.
Eyes: Immediately flush with water for 15 minutes.
Inhalation: Remove to fresh air. Get medical attention if ill effects persist.
Ingestion: Seek medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Water—Yes Carbon Dioxide—Yes Dry Chemical—Yes Foam—Yes
On large fires use dry chemical, foam or water spray. On small fires use carbon dioxide, dry chemical or water spray. Water can be used to cool fire exposed containers.
Autoignition Temp: Not determined.
Flash Point: N/A
Explosive limits in air: Not determined.

Fire Fighting Measures: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan. Use water spray to keep fire exposed containers cool.

Hazardous Decomposition Products

Thermal breakdown of this product during fire or very high heat conditions may evolve the following hazardous decomposition products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde. Nitrogen oxides. Hydrogen cyanide, and other hazardous byproducts.

NFPA Classification: Flammable: 1 Health: 2 Reactivity: 0 Specific Hazards: 0

6. ACCIDENTAL RELEASE MEASURES

Containment/Clean Up: Observe all personal protection equipment recommendations described in Sections 5 and 8. Wipe up or scrape up and contain for salvage or disposal. Clean area as appropriate since spilled materials, even small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Local, state and federal laws and regulations may apply to releases and disposal of this material, as well as those materials and item employed in the cleanup of releases. You will need to determine which federal, state and local laws and regulations are applicable. Sections 13 and 15 of this MSDS provide information regarding certain federal and state requirements.

7. HANDLING AND STORAGE

Handling precautions:

Use with adequate ventilation. Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within exposure guidelines or use respiratory protection. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus. Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally.

Storage: Keep containers closed and store away from water or moisture.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Component Exposure Limits

CAS Number	Component Name	Exposure Limits
22984-54-9	Methyl tri(ethylmethylketoxime) silane	See ethyl methyl ketoxime comments
1760-24-3	Aminoethylaminopropyltrimethoxysilane	See methyl alcohol comments

Ethyl methyl ketoxime is formed upon contact with water or humid air. Provide adequate ventilation to control exposures within the following exposure guidelines: Venor guide TWA: 3 ppm, STEL: 10 ppm; AIHA WEEL TWA: 10ppm. Methyl alcohol forms on contact with water or humid air. Provide adequate ventilation to control exposures within guidelines of OSHA PEL: TWA 200 ppm and ACGIH TLV-skin: TWA 200 ppm, STEL 250 ppm.

Engineering Controls: Local Ventilation – Recommended
General Ventilation - Recommended

Personal Protection Equipment

Respiratory: Wear a NIOSH approved filtering face piece dust mask wear ventilation is not adequate with particulate filters in atmosphere to 10X the PEL. Use in a well ventilated area.

Eye: Use proper protection – safety glasses as a minimum.

Skin: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

Suitable Gloves – Butyl Rubber. Natural rubber. Neoprene Rubber(R). Nitrile Rubber, Silver Shield (R). 4H(R).

Inhalation: Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. IH personnel can assist in judging the adequacy of existing engineering controls.

Suitable Respirator – General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators.

Personal Protective Equipment for Spills

Eyes: Use full face respirator.

Skin: Wash at mealtime and end of shift. If skin contact occurs, change contaminated clothing as soon as possible and thoroughly flush affected areas with cool water. Chemical protective gloves are recommended.

Inhalation/Suitable Respirator: Respiratory protection recommended. Follow OSHA Respirator Regulations (29 CFR 1910.134) and use NIOSH/MHSA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Precautionary Measures: Avoid eye contact. Avoid skin contact. Avoid breathing vapor. Keep container closed. Do not take internally. Use reasonable care.

Comments: Product evolves methyl ethyl ketoxime (MEKO) when exposed to water or humid air. Provide ventilation during use to control methyl ethyl ketoxime (MEKO) within guidelines or use respiratory protection. Product evolves flammable methyl alcohol when exposed to water or humid air. Provide ventilation during use to control exposure within Section 8 guidelines or use air-supplied or self-contained breathing apparatus.

Note: These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may require added precautions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Paste with granules	Color:	Varies in color.
Odor:	Some odor		
Specific Gravity @ 25°C:	1.04	Viscosity:	Not determined
Boiling Point:	Not determined	Freezing/Melting Point:	Not determined
Solubility in water:	Not determined		

10. STABILITY AND REACTIVITY

Stability: This product is stable.

Incompatibility: NA

Decomposition: NA

Materials to Avoid: Water, moisture, or humid air can cause hazardous vapors to form as described in Section 8. Oxidizing material can cause a reaction.

11. TOXICOLOGICAL INFORMATION

Component Toxicology Information

Methyl Ethyl Ketoxime (MEKO) is formed upon contact with water or humid air. Male rodents exposed to MEKO vapor throughout their lifetime developed liver cancer. Additional testing is planned by the MEKO supplier to determine any relevance to humans. Until more data is known, exposure levels should be maintained as low as achievable.

Special Hazard Information on Components

Sensitizers

CAS Number	Wt%	Component Name	
22984-54-9	3.0 – 7.0	Methyl tri(ethylmethylketoxime) silane	Possible skin sensitizer.
1760-24-3	1.0 – 5.0	Aminoethylaminopropyltrimethoxysilane	Possible skin sensitizer.

12. ECOLOGICAL INFORMATION

Environmental Fate and Distribution

Air: This product is a solid consisting of a high molecular weight silicone polymer and other solid materials. Unless milled to produce a dust or particles, it is unlikely to give rise to atmospheric contamination.

Water: This product is a solid which is completely insoluble in water. As the specific gravity is >1, it will sink to the bottom of the water course.

Soil: This product will enter the terrestrial environment if, as a component of municipal or industrial solid waste then product is land-filled. It is unlikely that further significant transformation of the product will occur.

Degradation: High molecular weight polymer which is amendable to recycling. The product is not biodegradable. The product is removed >80% during the sewage treatment process.

Environmental Effects

Toxicity to Water Organisms:

This product has low water solubility and should not present a risk to aquatic organisms.

Toxicity to Soil Organisms:

This product is a solid and does not contain significant concentrations of water soluble constituents that may be leached from the product. It is therefore not likely to present a danger of terrestrial organisms.

Bioaccumulation: This product is a solid which is not soluble in water and if ingested will not be absorbed.

Fate and Effects in Waste Water Treatment Plants

This product is a solid rubber type material which is unlikely to have any adverse effect on bacteria.

13. DISPOSAL CONSIDERATIONS**RCRA Hazard Class (40 CFR 261)**

Waste disposal or recycling: Recover and place material in a suitable container for intended use or disposal. Recycle when possible.

14. TRANSPORT INFORMATION

DOT/TDG Classification: Not controlled.

IMDG Classification: Not controlled.

IATA Classification: Not controlled.

15. REGULATORY INFORMATION

Other Regulations: Some or all of the reportable chemical substances in this product are regulated by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

R-phrases: R36, Irritating to eyes. R42, May cause sensitization by inhalation.

S-phrases: S22, Do not breathe substance.

S25, Avoid contact with eyes.

16. OTHER INFORMATION