



Safety Data Sheet

Date Revised: 7/1/2016

Supersedes:

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): **Fast Set Accelerator**

Synonyms: N/A

Product Use: Instant Grout Additive is used to formulate/manufacture hydraulic cement binder for use in grout applications used to support machinery and equipment.

Restrictions on Use: See conditions to avoid and incompatible materials in Section 10.

Manufacturer/Supplier: Five Star Products, Inc.
60 Parrott Drive
Shelton, CT 06484 USA

Phone #: 203-336-7900

Emergency Phone #: **CHEM-TEL 1-800-255-3924**
(Outside the U.S. 1-813-248-0585)

SECTION 2: HAZARD(S) IDENTIFICATION-GHS INFORMATION

Classification: Skin Corrosion/Irritation – Category 1
Eye Damage/ Eye Irritation – Category 1
Skin Sensitization – Category 1B
Specific Target Organ Systemic Toxicity (Single Exposure) – Category 3

Label Elements/Hazard Pictograms:



Signal Word: Danger

Hazard Statements: Harmful if swallowed, H302
May cause skin irritation, H317
Causes severe skin burns and eye damage, H314
May cause respiratory irritation, H335

Precautionary Statements/Prevention: Wash thoroughly after handling, P264.
Do not eat, drink or smoke when using this product, P270.
Contaminated work clothing should not be allowed out of the workplace, P272.
Wear protective gloves, protective clothing, eye protection and face protection, P280.
Wear respiratory protection, P284.



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Response: If swallowed: Rinse mouth. Do NOT induce vomiting, P330, P331.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower, P361, P353.
 If inhaled: Remove person to fresh air and keep comfortable for breathing, P340.
 If in eyes: Rinse cautiously with water for several minutes, P351. Remove contact lenses, if present and easy to do. Continue rinsing, P338.
 Immediately call a poison center or doctor, P310.
 If skin irritation or rash occurs, P333: Get medical advice/attention, P313.
 If experiencing respiratory symptoms, P342: Call a poison center or doctor, P310. Wash contaminated clothing before reuse, P363.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.

Disposal: Dispose of contents/container to an approved waste disposal plant.

Hazards Not Otherwise Classified: Wet cement, especially as an ingredient in plastic (unhardened) concrete, mortar, or slurries can dry the skin and cause alkali burns. Product may harden on contact with water.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS			
Hazardous Ingredient(s)	Common Name/Synonyms	CAS No.	% wt/wt
Hydraulic Cement	n/a	65997-15-1	> 97
Crystalline Silica	Silicon Dioxide	14808-60-7	0.0-0.0.2

SECTION 4: FIRST AID MEASURES

Inhalation: If inhaled: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.

Eye Contact: If in eyes: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Seek immediate medical attention/advice.

Skin Contact: If on skin (or hair): Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. In the case of skin irritation or allergic reactions see a physician.

Ingestion: If swallowed: Do NOT induce vomiting. Rinse mouth. Call a physician immediately.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show label or SDS where possible).

Note to Physicians: Symptoms may not appear immediately. Treat symptomatically.



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SECTION 5: FIRE-FIGHTING MEASURES

Flammability and Explosion Information:

Non-combustible

Sensitivity to Mechanical Impact:

None

Sensitivity to Static Discharge:

None

MEANS OF EXTINCTION

Suitable Extinguishing Media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media:

CAUTION: Use of water spray when fighting fire may be inefficient.

Product of Combustion:

Non-combustible

Protection of Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

Use personal protective equipment. Ensure adequate ventilation. Keep people from spill. Avoid dust formation.

Personal Precautions:

Avoid inhalation of dust. Do not get into eyes, on skin, or on clothing.

Environmental Precautions:

See Section 12 for additional Ecological Information.

Methods for Containment:

Cover powder spill with plastic sheet or tarp to minimize spreading. Collect the material into a disposal container by sucking up or sweeping up. Prevent dust cloud.

Methods for Cleanup:

Pick up and transfer to properly labeled containers.

Other Information:

See Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

Handling:

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Prevent contact with skin, eyes and clothing. Wash thoroughly after handling.

Storage:

Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Keep away from water.



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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Component	CAS No.	ACGIH TLV	OSHA PEL
Hydraulic Cement	65997-15-2	TWA: 3 mg/m ³ respirable particles; TWA: 10 mg/m ³ Inhalable particles	TWA: 5 mg/m ³ respirable fraction; TWA: 15 mg/m ³ total fraction
Quartz	14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	30/(%SiO ₂ +2) mg/m ³ TWA, Total Dust; 250/(%SiO ₂ +5) mppcf TWA, respirable fraction; 10/(%SiO ₂ +2) mg/m ³ TWA, respirable TWA: 0.1 mg/m ³ (vacated)

PEL: Permissible Exposure Limit TLV: Threshold Limit Value

Engineering Controls: Showers
 Eye wash stations
 Ventilation systems

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Eye/Face Protection: Tightly fitting safety goggles

Hand Protection: Impervious gloves

Skin and Body Protection: Impervious clothing

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive- pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feeding stuffs. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Provide regular cleaning of equipment, work area and clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Grey, brown or white
Color:	Grey, brown or white
Odor:	Earthy, dust
Odor Threshold:	Not Applicable
Physical State:	Solid, powder



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pH:	12-13 (in water)
Melting Point / Freezing Point:	2318 - 2624°F (1270 - 1440°C)
Initial Boiling Point:	Not Applicable
Boiling Point:	Not Applicable
Flash Point:	None
Evaporation Rate:	Not Applicable
Flammability (solid, gas):	Not Applicable
Lower Flammability Limit:	None
Upper Flammability Limit:	None
Vapor Pressure:	Not Applicable
Vapor Density:	Not Applicable
Relative Density:	2.5 - 3.1
Solubility:	Slightly/ Negligible
Partition Coefficient: n-Octanol/Water:	Not Applicable
Auto-ignition Temperature:	Not Combustible
Decomposition Temperature:	Not Applicable
Viscosity:	Not Applicable
Percent Volatile, wt. %:	Not Applicable
VOC Content, wt. %:	Not Applicable
Density:	2.5 - 3.1 g/cc
Coefficient of Water/Oil Distribution:	Not determined

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	None under normal processing.
Conditions to Avoid:	Exposure to water. Product may harden on contact with water.
Incompatible Materials:	Strong acids.



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SECTION 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Primary Irritant Effect on the Skin:

Irritating to skin. May cause allergic skin reaction.

Primary Irritant Effect On the Eye:

Risk of serious damage to eyes.

Inhalation:

Irritating to respiratory system. Irritating to mucous membranes.

Ingestion:

Harmful if swallowed.

Hazard Class	Cat.	Effect
Acute toxicity - oral	-	No indication of oral toxicity from studies with cement kiln dust. Based on available data, the classification criteria are not met.
Acute toxicity - dermal	-	Limit test, rabbit, 24 hours contact, 2,000 mg/kg body weight - no lethality. Based on available data, the classification criteria are not met.
Acute toxicity - inhalation	-	No acute toxicity by inhalation observed. Based on available data, the classification criteria are not met.
Skin Corrosion/Irritation	1	Cement in contact with wet skin may cause thickening, cracking, or fissuring of the skin. Prolonged contact in combination with abrasion may cause severe burns.
Eye Damage/Eye Irritation	1	Portland cement clinker caused a mixed picture of corneal effects and the calculated irritation index was 128. Direct contact with cement may cause corneal damage by mechanical stress, immediate or delayed irritation or inflammation. Direct by larger amounts of dry cement or splashes of wet cement may cause effects ranging from moderate eye irritation (e.g. conjunctivitis or blepharitis) to chemical burns and blindness.
Respiratory Sensitization	-	There is no indication of sensitization of the respiratory system. Based on available data, the classification criteria are not met.
Skin Sensitization	1B	Some individuals may develop eczema upon exposure to wet cement dust, caused either by the high pH which induces irritant contact dermatitis after prolonged contact, or by an immunological reaction to soluble Cr(VI) which may elicit allergic contact dermatitis. The response may appear in a variety of forms ranging from a mild rash to severe dermatitis and is a combination of the two above mentioned mechanisms. If the cement contains a soluble Cr(VI) reducing agent and as long as the mentioned period of effectiveness of the chromate reduction is not exceeded, a sensitizing effect is not expected.
Carcinogenicity	-	No causal association has been established between Portland cement exposure and cancer. The epidemiological literature does not support the designation of Portland cement as a suspected carcinogen. Portland cement is not classifiable as a human carcinogen (according to ACGIH A4: Agents that cause concern that they could be carcinogenic for humans but which cannot be assessed conclusively because of a lack of data. In vitro or animal studies do not provide indications of carcinogenicity that are sufficient to classify the agent with one of the other notations.). Based on available data, the classification criteria are not met.



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STOT(Single Exposure)	3	Cement dust may irritate the throat and respiratory tract. Coughing, sneezing, and shortness of breath may occur following exposures in excess of occupational exposure limits. Overall, the pattern of evidence clearly indicates that occupational exposure to cement dust has produced deficits in respiratory function. However, evidence available at the present time is insufficient to establish with any confidence the dose-response relationship for those effects.
STOT(Repeated Exposure)	-	There is an indication of COPD. The effects are acute and due to high exposures. No chronic effects or effects at low concentration have been observed. Based on the available data, the classification criteria are not met.

Apart from skin sensitization, Portland cement clinker and common hydraulic cements have the same toxicological and eco-toxicological properties.

Medical Conditions Aggravated by Exposure: Inhaling cement dust may aggravate existing respiratory system disease(s) and/or medical conditions such as emphysema or asthma and/or existing skin and/or eye conditions.

Secondary Component Information:

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Quartz	500 mg/kg (Rat)		

Symptoms related to the physical, chemical and toxicological characteristics: No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure

Sensitization: May cause sensitization by skin contact.

Mutagenic Effects: No information available.

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). May cause cancer by inhalation.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz	A2*	Group 1	Known	X

The presence of a minimal amount of crystalline silica is typical in cement, the respirable fraction as a whole is less than 0.1% and anticipated usage would generate far less than 0.1% as a respirable quantity above exposure guidelines as noted in Section 8.

ACGIH: (American Conference of Governmental Industrial Hygienists): A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer): Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program): Known Carcinogen



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OSHA: (Occupational Safety & Health Administration):	X - Present
Reproductive Toxicity:	No information available.
STOT - single exposure:	May cause respiratory irritation.
STOT - repeated exposure:	Causes damage to organs through prolonged or repeated exposure if inhaled. Lungs.
Chronic Toxicity:	Inhalation overexposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease.
Aspiration Hazard:	No information available.
Numerical measures of toxicity - Product	
The following values are calculated based on chapter 3.1 of the GHS document:	
	LD 50 Oral: 500 mg/kg; Acute toxicity estimate

SECTION 12: ECOLOGICAL INFORMATION

Toxicity:	The product is not hazardous to the environment. Eco-toxicological tests with Portland cement on Daphnia magna and Selenastrum coli have shown little toxicological impact. Therefore LC50 and EC50 values could not be determined. There is no indication of sediment phase toxicity. The addition of large amounts of cement to water may, however; cause a rise in pH and may, therefore, be toxic to aquatic life under certain circumstances.
Aquatic Toxicity	
Persistence and Degradability:	Not relevant. After hardening, cement presents no toxicity risks.
Bio-accumulative Potential:	Not relevant. After hardening, cement presents no toxicity risks.
Mobility in Soil:	Not relevant. After hardening, cement presents no toxicity risks.
Ecotoxicological Effects Remark:	No information available.
Additional Ecological Information:	No information available.
General Notes:	If spilled, will raise pH of surrounding environment in contact with water until hardened or diluted.
PBT Assessment:	Not relevant. After hardening, cement presents no toxicity risks.
vPvB Assessment:	Not relevant. After hardening, cement presents no toxicity risks.
Other Adverse Effects:	No further relevant information available.



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SECTION 13: DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Recommendation: This material, as supplied, is not a hazardous waste according to Federal Regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Uncleaned Packaging

Recommendation: Do not re-use empty containers.

SECTION 14: TRANSPORT INFORMATION

US DEPARTMENT of TRANSPORTION (DOT) Proper

Shipping Name: Not Regulated

Class: Not Applicable

UN #: Not Applicable

Packing Group: Not Applicable

CANADA Transportation of Dangerous Goods (TDG) Proper

Shipping Name: Not Regulated

Class: Not Applicable

UN #: Not Applicable

Packing Group: Not Applicable

INTERNATIONAL AIR TRANSPORTATION (ICAO/IATA)

Proper Shipping Name: Exempt from transport classification and labeling.

Class: Not Applicable

UN #: Not Applicable

Packing Group: Not Applicable

WATER TRANSPORTATION Proper Shipping Name (IMO/IMDG):

Exempt from transport classification and labeling.

Class: Not Applicable

UN #: Not Applicable

Packing Group: Not Applicable



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Marine Pollutant: Not Applicable

SECTION 15: REGULATORY INFORMATION

CHEMICAL INVENTORIES

US (TSCA): The components of this product are in compliance with the chemical notification requirements of TSCA.

CANADA (DSL): The components of this product are in compliance with the chemical notification requirements of NSN Regulations under CEPA, 1999.

WHMIS Classification: None

US FEDERAL REGULATIONS: Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

UNITED STATES: This SDS has been prepared to meet the US OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SARA Title III:	Acute Health Hazard	Yes
	Chronic Health Hazard	Yes
	Fire Hazard	No
	Sudden Release of Pressure Hazard	No
	Reactive Hazard	No

STATE REGULATIONS

CLEAN WATER ACT: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA: This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

US STATE Right to Know Regulations:

Chemical Name	NJ	MA	PA	IL	RI
Hydraulic Cement	X	X	X		X
Quartz	X	X	X		X

California California Prop 65: This product contains the following Proposition 65 chemicals.
Chemical Name: Quartz CAS-No: 14808-60-7 CA Prop. 65: Carcinogen



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SECTION 16: OTHER INFORMATION

HMIS Rating:

Health	Flammability	Physical Hazard	Personal Protection
1	0	1	E

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