

**HI-FLOW GROUT - 50 LB BAG**Version 1.1  
REVISION DATE: 08/23/2007

Print Date 08/24/2007

**SECTION 1 - PRODUCT IDENTIFICATION**

Trade name : HI-FLOW GROUT - 50 LB BAG  
 Product code : 088H 50

COMPANY : Euclid Chemical Company  
 19218 Redwood Road  
 Cleveland, OH 44110

Telephone : 1-800-321-7628  
 Emergency Phone: : U.S. only: 1-800-255-3924  
 International Users Call Collect: 1-813-248-0585

**SECTION 2 - HAZARDS IDENTIFICATION****Emergency Overview**

Gray. Powder. Dust may irritate nose and throat. Dust irritating to the respiratory tract. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

**Acute Potential Health Effects/ Routes of Entry**

Inhalation : Dust may irritate nose and throat. Dust irritating to the respiratory tract.  
 Eyes : Direct contact may cause severe irritation. May cause mechanical irritation or abrasion, and possible chemical burns. May cause temporary injury.  
 Ingestion : May cause irritation to the mouth, throat and stomach. May cause gastrointestinal irritation, nausea, and vomiting.  
 Skin : May cause severe irritation. May cause dryness, cracking, irritation, and chemical burns. May produce cement dermatitis due to primary irritation from alkaline, hygroscopic and abrasive properties.

**Aggravated Medical Conditions**

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

**Chronic Health Effects**

Inhalation of crystalline silica (quartz) can cause cancer based on animal data, and IARC concludes sufficient evidence in humans (Group 1). Prolonged and repeated overexposure to free crystalline silica dust above the TLV level may cause scarring of the lungs with cough and shortness of breath. A delayed lung injury, silicosis may result from breathing free silica.

**SECTION 3 - PRODUCT COMPOSITION**

Chemical Name	CAS-No.	Weight %
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	40.0 - 70.0
Portland cement	65997-15-1	15.0 - 40.0
Silica, fused	60676-86-0	10.0 - 30.0
Amorphous silica	7631-86-9	3.0 - 7.0
Calcium salt	7778-18-9	1.0 - 5.0

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Formaldehyde

50-00-0

- &lt;0.1

**SECTION 4 - FIRST AID MEASURES**

Get immediate medical attention for any significant overexposure.

- Inhalation : Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.
- Eye contact : Flush with water for at least 15 minutes while holding eye lids apart. Get medical attention immediately.
- Skin contact : Clean area of contact thoroughly using soap and water. If irritation, rash or other disorders develop, get medical attention immediately.
- Ingestion : Do not induce vomiting unless advised by a physician. Call nearest Poison Control Center or Physician immediately.

**SECTION 5 - FIRE FIGHTING MEASURES**

- Flash point : Not available.
- Method : Not available.
- Lower explosion limit : Not available.
- Upper explosion limit : Not available.
- Autoignition temperature : Not available.
- Extinguishing media : This product is not expected to burn under normal conditions of use. Use that which is appropriate to the surroundings.
- Hazardous combustion products : Not available.
- Protective equipment for firefighters : Not applicable. Product is not expected to burn.
- Fire and explosion conditions : This product not expected to ignite under normal conditions of use.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

Use appropriate protective equipment. Avoid contact with material. Dampen material with water to control dusting. Scoop up and transfer to appropriate container for disposal. Flush spill area with water.

**SECTION 7 - HANDLING AND STORAGE**

Prevent inhalation of dust and contact with skin and eyes. Clean hands thoroughly after handling. Precautions also apply to emptied containers. Personal protective equipment must be worn during maintenance or repair of contaminated mixer, reactor, or other equipment. Store in sealed containers in a cool, dry, ventilated warehouse location.



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**SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Personal protection equipment**

- Respiratory protection : Wear appropriate, properly fitted NIOSH/MSHA approved dust respirator where airborne concentrations are expected to exceed exposure limits indicated on the MSDS. Follow manufacturer's directions for respirator use.
- Hand protection : Use suitable impervious rubber or vinyl gloves and protective apparel to reduce exposure.
- Eye protection : Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily available.
- Skin and body protection : Prevent contact with shoes and clothing.
- Protective measures : Use professional judgment in the selection, care, and use. Wear gloves, head coverings and full body clothing as necessary to prevent skin irritation. Washable or disposable clothing may be used. Do not take unwashed clothing home. Work clothes should be washed separately from other clothing and the washing machine rinsed thoroughly following use. Inform the launderer of the proper procedures. Store work clothes and street clothes separately to prevent contamination.
- Engineering measures : Use only in well ventilated areas. Provide maximum ventilation in enclosed areas. Use local exhaust when the general ventilation is inadequate.

**Exposure Limits**

Chemical Name	CAS Number	Regulation	Limit	Form
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	OSHA TWA:	0.1 mg/m3	Respirable.
		OSHA TWA:	0.3 mg/m3	Total dust.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	0.025 mg/m3	Respirable fraction.
Portland cement	65997-15-1	ACGIH TWA:	10 mg/m3	Respirable fraction.
		OSHA PEL:	5 mg/m3	
		OSHA PEL:	15 mg/m3	Total dust.
Amorphous silica	7631-86-9	ACGIH TWA:	3 mg/m3	Respirable particles.
		ACGIH TWA:	10 mg/m3	Inhalable particles.
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA PEL:	5 mg/m3	Respirable fraction.
		OSHA TWA:	0.8 mg/m3	
Calcium salt	7778-18-9	ACGIH TWA:	10 mg/m3	Respirable fraction.
		OSHA PEL:	5 mg/m3	
		OSHA PEL:	15 mg/m3	Total dust.
		OSHA TWA:	15 mg/m3	Total dust.
		OSHA TWA:	5 mg/m3	Respirable fraction.
		ACGIH TWA:	10 mg/m3	Inhalable fraction.



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**SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**

Form : Powder  
 Color : Gray  
 Odor : None  
 pH : Not available.  
 Vapour pressure : Not available.  
 Vapor density : Not available.  
 Melting point/range : Not available.  
 Freezing point : Not available.  
 Boiling point/range : Not available.  
 Water solubility : Miscible  
 Specific Gravity : 3.45  
 % Volatile Weight : 0.0 %

**SECTION 10 - REACTIVITY / STABILITY**

Substances to avoid : Not Applicable.  
 Stability : Material is stable under normal storage, handling, and use.  
 Hazardous polymerization : Will not occur under normal conditions.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

Amorphous silica, CAS-No.: 7631-86-9  
 Acute oral toxicity (LD-50 oral) 22,500 mg/kg ( Rat ) 22,500 mg/kg ( Rat ) 15,000 mg/kg ( Mouse ) 15,000 mg/kg ( Mouse )

Formaldehyde, CAS-No.: 50-00-0  
 Acute oral toxicity (LD-50 oral) 800 mg/kg ( Rat ) 260 mg/kg ( Guinea pig ) 100 mg/kg ( Rat ) 42 mg/kg ( Mouse )  
 Acute inhalation toxicity (LC-50) 0.82 mg/l for 30 min ( Rat ) 0.48 mg/l for 4 h ( Rat ) 0.414 mg/l for 4 h ( Mouse ) 0.4 mg/l for 2 h ( Mouse )

**SECTION 12 - ECOLOGICAL INFORMATION**

No Data Available

**SECTION 13 - DISPOSAL CONSIDERATIONS**

Disposal Method : Not regulated under RCRA. Dispose of in compliance with state and local regulations.



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Do not incinerate.

**SECTION 14 - TRANSPORTATION / SHIPPING DATA**

**TDG / DOT Shipping Description:**

NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION**

**North American Inventories:**

All components are listed or exempt from the TSCA inventory.  
 This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

**U.S. Federal Regulations:**

SARA 313 Components : None present or none present in regulated quantities.

SARA 311/312 Hazards : Acute Health Hazard  
 Chronic Health Hazard

**OSHA Hazardous Components :**

Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
Portland cement	65997-15-1
Amorphous silica	7631-86-9
Calcium salt	7778-18-9

OSHA Status: Considered : Irritant  
 hazardous based on the : Carcinogen  
 following criteria:

OSHA Flammability : Not Regulated

Regulatory VOC (less water and : 0 g/l  
 exempt solvent)  
 VOC Method 310 : 0 %

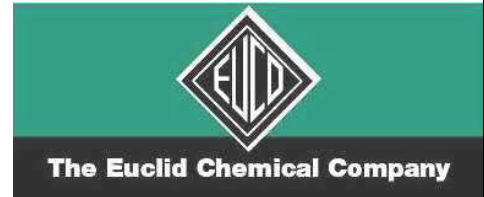
Chemical is listed as an IARC, NTP, OSHA, or ACGIH Carcinogen:

Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
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**U.S. State Regulations:**

MASS RTK Components	:	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Portland cement	65997-15-1
		Silica, fused	60676-86-0
		Amorphous silica	7631-86-9
		Calcium salt	7778-18-9
		Formaldehyde	50-00-0

Penn RTK Components	:	Crystalline Silica (Quartz)/ Silica Sand	14808-60-7
		Portland cement	65997-15-1
		Silica, fused	60676-86-0
		Amorphous silica	7631-86-9
		Calcium salt	7778-18-9



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NJ RTK Components : Crystalline Silica (Quartz)/ Silica Sand 14808-60-7  
 Portland cement 65997-15-1  
 Silica, fused 60676-86-0  
 Amorphous silica 7631-86-9  
 Calcium salt 7778-18-9

WARNING! Contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm:  
 14808-60-7 Crystalline Silica (Quartz)/ Silica Sand  
 91-22-5 Quinoline

**SECTION 16 - OTHER INFORMATION**

**HMIS Rating :**

Health	2
Flammability	0
Reactivity	1
PPE	

0 = Minimum  
 1 = Slight  
 2 = Moderate  
 3 = Serious  
 4 = Severe

**Further information:**

For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

**Prepared by: Rich Mikol**

**Legend**

- ACGIH - American Conference of Governmental Hygienists
- CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
- DOT - Department of Transportation
- DSL - Domestic Substance List
- EPA - Environmental Protection Agency
- HMIS - Hazardous Materials Information System
- IARC - International Agency for Research on Cancer
- MSHA - Mine Safety Health Administration
- NDSL - Non-Domestic Substance List
- NIOSH - National Institute for Occupational Safety and Health
- NTP - National Toxicology Program
- OSHA - Occupational Safety and Health Administration
- PEL - Permissible Exposure Limit
- RCRA - Resource Conservation and Recovery Act
- RTK - Right To Know
- SARA - Superfund Amendments and Reauthorization Act
- STEL - Short Term Exposure Limit
- TLV - Threshold Limit Value
- TSCA - Toxic Substances Control Act
- TWA - Time Weighted Average
- V - Volume
- VOC - Volatile Organic Compound
- WHMIS - Workplace Hazardous Materials Information System