



1. Product Name

QUIKRETE® Concrete Mix #1101

2. Manufacturer

The QUIKRETE Companies
 One Securities Centre
 3490 Piedmont Rd., NE, Suite 1300
 Atlanta, GA 30305
 (404) 634-9100
 Fax: (404) 842-1424
 www.quikrete.com

3. Product Description

BASIC USE

For pouring concrete 2" (51 mm) thick or more and building or repairing anything out of concrete, including:

- Foundation walls and footings
- Sidewalks, curbs, steps, ramps and walkways
- Appliance and equipment platforms
- Pipe and post footings
- Floor slabs and patios
- Pools, fish pools, stepping stones
- Splashblocks and bird baths
- Riprap & slope protection
- Driveway repairs

COMPOSITION & MATERIALS

QUIKRETE Concrete Mix consists of a uniformly blended, properly proportioned mixture of stone, gravel, sand, Portland cement and other ingredients approved for use in concrete.

SIZES

- 40 lb (18.1 kg) bags
- 60 lb (27.2 kg) bags
- 80 lb (36.2 kg) bags

YIELD

- An 80 lb (36.3 kg) bag yields approximately 0.60 cu ft (17 L)
- A 60 lb (27.2 kg) bag yields approximately 0.45 cu ft (12.7 L)
- A 40 lb (18.1 kg) bag yields approximately 0.30 cu ft (8.5 L)

4. Technical Data

APPLICABLE STANDARDS

ASTM International - ASTM C387 Standard Spe-

cifications for Packaged, Dry, Combined Materials for Mortar and Concrete

PHYSICAL/CHEMICAL PROPERTIES

QUIKRETE Concrete Mix exceeds the compressive strength requirements of ASTM C387, as shown in Table 1.

5. Installation

PREPARATORY WORK

Stake out the planned area and remove sod or soil to the desired depth. Nail and stake forms securely in place. Tamp and compact the subbase until firm.

MACHINE MIXING INSTRUCTIONS

QUIKRETE Concrete Mix can be mixed in a barrel-type concrete mixer or a mortar mixer.

- Choose the mixer size most appropriate for the size of the job to be done
- Allow at least 1 cu ft (28 L) of mixer capacity for each 80 lb (36.3 kg) bag of QUIKRETE Concrete Mix to be mixed at one time
- For each 80 lb (36.3 kg) bag of QUIKRETE Concrete Mix to be mixed, add approximately 6 pt (2.8 L) of fresh water to the mixer
- Turn on the mixer and begin adding the concrete to the mixer
- If the material becomes too difficult to mix, add additional water until a workable mix is obtained
- If a slump cone is available, adjust water to achieve a 2" - 3" (51 - 76 mm) slump

Note - Final water content should be approximately 6 - 9 pt (2.8 - 4.3 L) of water per 80 lb (36.3 kg) bag of concrete. For other bag sizes, use Table 2 to determine water content.

HAND MIXING INSTRUCTIONS

- Empty concrete bags into a suitable mixing container
- For each 80 lb (36.3 kg) bag of mix, add approximately 6 pt (2.8 L) of clean water
- Work the mix with a shovel, rake or hoe and



QUIKRETE® Concrete Mix #1101

add water as needed until a stiff, moldable consistency is achieved

- Be sure all material is wet
- Do not leave standing puddles

Note - For other bag sizes, use Table 2 to determine water content.

APPLICATION

Method for Pouring a Slab

- Dampen the subgrade before concrete is placed
- Do not leave standing puddles
- Shovel or place concrete into the form; fill to the full depth of the form
- After concrete has been compacted and spread to completely fill the forms without air pockets, strike off and float immediately
- To strike off, use a straight board (screed), moving the edge back and forth with a saw-like motion to smooth the surface
- Use a darby or bull float to float the surface; this levels any ridges and fills voids left by the straight edge
- Cut the concrete away from the forms by running an edging tool or trowel along the forms to compact the slab edges
- Cut 1" (25.4 mm) deep control joints into the slab every 6' - 8' (1.8 - 2.4 m) using a grooving tool

TABLE 1 TYPICAL PROPERTIES OF QUIKRETE CONCRETE MIX ¹

Cure time	Compressive strength
7 days	2500 psi (17.2 MPa)
28 days	4000 psi (27.6 MPa)
Slump range	2" - 3" (51 - 76 mm)

¹ Laboratory testing is conducted in accordance with ASTM C387.

TABLE 2 MIXING WATER FOR QUIKRETE CONCRETE MIX

Package size, lb (kg)	Starting water content, pt (L)	Final water content, pt (L)
80 (36.3)	6 (2.8)	6 - 9 (2.8 - 4.3)
60 (27.2)	4 (1.9)	4 - 7 (1.9 - 3.3)
40 (18.1)	3 (1.4)	3 - 4.5 (1.4 - 2.1)



- Allow concrete to stiffen slightly, waiting until all water has evaporated from the surface before troweling or applying a broom finish

Note - For best results, do not overwork the material.

Method for Setting Fence Posts

- Dig post hole about 3 times the diameter of the post. Hole depth should be 1/3 the overall post height
- Place 6" (152 mm) of dry concrete mix in the bottom of the hole. Position the post, checking that it is level and plumb. Combine concrete mix with water and place into the hole
- When standing water has evaporated from the concrete, smooth the surface. Taper it away from the post so rain will flow in that direction. Wait 24 hours before post is subjected to any strain
- For load-bearing applications, follow local building codes for proper footing specifications

FINISHING

Any standard concrete finishing technique is acceptable for use with QUIKRETE Concrete Mix. Concrete can be hand troweled, power troweled, broom finished or finished with other specialty finishes.

CURING

General

Curing is one of the most important steps in concrete construction. Proper curing increases the strength and durability of concrete, and a poor curing job can ruin an otherwise well-done project. Proper water content and temperature are essential for good curing. In near freezing temperatures the hydration process slows considerably. When weather is too hot, dry or windy, water is lost by evaporation from the concrete, and hydration stops, resulting in finishing difficulties and cracks. The ideal circumstances for curing are ample moisture and moderate temperature and wind conditions.

Curing should be started as soon as possible and should continue for a period of 5 days in warm weather at 70 degrees F (21 degrees C) or higher or 7 days in colder weather at 50 - 70 degrees F (10 - 21 degrees C).

Specific Curing Methods

- QUIKRETE Concrete Sealer provides the easiest and most convenient method of curing. Apply by spray, brush or roller soon after the final finishing operation when the surface is hard. The surface may be damp, but not

wet, when applying curing compound. Complete coverage is essential

- Other methods of providing proper curing include covering the surface with wet burlap; keeping the surface wet with a lawn sprinkler and sealing the concrete surface with plastic sheeting or waterproof paper to prevent moisture loss
- If burlap is used, it should be free of chemicals that could weaken or discolor the concrete. New burlap should be washed before use. Place it when the concrete is hard enough to withstand surface damage and sprinkle it periodically to keep the concrete surface continuously moist
- Water curing with lawn sprinklers, nozzles or soaking hoses must be continuous to prevent interruption of the curing process
- Curing with plastic sheets is convenient. They must be laid flat, thoroughly sealed at joints and anchored carefully along edges

PRECAUTIONS

- Curing compounds should not be applied if rain or temperatures below 50 degrees F (10 degrees C) are expected within 24 hours
- Curing with plastic or burlap can cause patchy discoloration in colored concrete. For colored concrete, wet curing or the use of QUIKRETE Concrete Sealer is recommended
- Do not use curing compounds during late fall on surfaces where de-icers will be used to melt ice and snow. Using curing compounds at that time may prevent proper air drying of the concrete, which is necessary to enhance its resistance to damage caused by de-icers
- Protect concrete from freezing during the first 48 hours. Plastic sheeting and insulation blankets should be used if temperatures are expected to fall below 32 degrees F (0 degrees C)

6. Availability

QUIKRETE Concrete Mix is available at leading concrete construction supply houses and distributors. Contact QUIKRETE Construction Products for the name of the nearest dealer.

7. Warranty

The QUIKRETE Companies warrant this product to be of merchantable quality when used or applied in accordance with the instructions herein. The product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the

replacement of its product (as purchased) found to be defective, or at the shipping companies' option, to refund the purchase price. In the event of a claim under this warranty, notice must be given to The QUIKRETE Companies in writing. This limited warranty is issued and accepted in lieu of all other express warranties and expressly excludes liability for consequential damages.

8. Maintenance

None required.

9. Technical Services

The QUIKRETE Companies maintain technical field representatives throughout the country. Contact a local distributor for the name and number of the nearest representative or call QUIKRETE Construction Products.

10. Filing Systems

Additional product information is available from the manufacturer.



1. Product Name

QUIKRETE® Fast-Setting Concrete #1004-50

2. Manufacturer

The QUIKRETE Companies
 One Securities Centre
 3490 Piedmont Rd., NE, Suite 1300
 Atlanta, GA 30305
 (404) 634-9100
 Fax: (404) 842-1424
 www.quikrete.com

3. Product Description

BASIC USE

QUIKRETE Fast-Setting Concrete is used for setting posts, sleeves and anchors, for pouring slabs 2" (51 mm) or thicker, and for other applications where a fast-setting general purpose concrete is desirable.

COMPOSITION & MATERIALS

QUIKRETE Fast-Setting Concrete consists of a uniformly blended mixture of stone or gravel, sand and special cements.

SIZE

- 50 lb (22.7 kg) bags

YIELD

- For posts - Two 50 lb (22.7 kg) bags will set a 4" (102 mm) diameter post in a 10" (254 mm) diameter hole 2' (0.6 m) deep
- For slabs - Approximately 0.375 cu ft (11 L) per 50 lb (22.7 kg) bag

4. Technical Data

APPLICABLE STANDARDS

ASTM International

- ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
- ASTM C191 Standard Test Method for Time of Setting of Hydraulic Cement by Vicat Needle
- ASTM C387 Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete

PHYSICAL/CHEMICAL PROPERTIES

Fast-Setting Concrete meets or exceeds the compressive strength requirements of ASTM C387. When mixed to a 2" - 3" (51 - 75 mm) slump, QUIKRETE Fast-Setting Concrete will achieve the typical physical properties shown in Table 1.

5. Installation

FOR SETTING POSTS

1. Place post into hole and temporarily stand straight. The hole diameter should be 3 times the post diameter. The depth of the post hole should be one-half of the above ground post height.
2. Pour dry mix into the hole until it is approximately 3" - 4" (76 - 102 mm) from the top.
3. Pour water into the dry mix until the powder is saturated with water. Depending on soil conditions, this will require about 1 gallon (3.8 L) of water per 50 lb (22.7 kg) bag. For holes deeper than 2' 6" (0.8 m), place the material in lifts of 2' 6" (0.8 m) or less to allow water to soak all the way through.
4. Fill the remainder of the hole with soil dug from the hole. Sets in 20 - 40 minutes. Wait 4 hours before placing heavy objects.

FOR POURING SLABS

Mix only as much material as can be placed in 20 minutes.

MACHINE MIXING INSTRUCTIONS

QUIKRETE Fast-Setting Concrete can be mixed in a barrel-type concrete mixer or a mortar mixer.

- Allow at least 3/4 cu ft (20 L) of mixer capacity for each 50 lb (22.7 kg) bag to be mixed at one time
- Add approximately 4 pt (1.9 L) of fresh water to the mixer for each bag to be mixed
- Turn on the mixer and begin adding concrete. If the material becomes too difficult to mix, add small amounts of water at a time



QUIKRETE® Fast-Setting Concrete #1004-50

and continue to work the mix until a workable consistency is obtained. Do not add more than 5 pt (2.4 L) of water per 50 lb bag

HAND MIXING INSTRUCTIONS

- Empty bags into a suitable mixing container
- Add approximately 4 pt (1.9 L) of clean water for each 50 lb (22.7 kg) bag
- Work the mix with a shovel, rake or hoe; add water as needed until a plastic-like consistency is achieved
- Do not add more than 5 pt (2.4 L) of water per 50 lb (22.7 kg) bag
- Be sure all material is uniformly mixed
- Do not leave standing puddles

TEMPERATURE OF WATER

Because of the rapid setting time, special precautions must be taken, as set times will fluctuate in extremely hot or cold weather. Use cold water or water mixed with ice cubes in severely hot weather. Use hot water when mixing in severely cold weather.

APPLICATION

- Shovel or place concrete into form. Fill to the full depth of the form. Start in a corner and do not drag or flow the concrete unnecessarily
- After the concrete has been spread to completely fill the forms, strike off and float immediately
- To strike off, simply use a straight board, moving the edge back and forth with a saw-like motion to smooth the surface. Then use a darby or bull float to float the surface. This helps level any ridges and fills voids left by the straight edge
- Allow the concrete to stiffen slightly, waiting until all water has evaporated from the surface before troweling or applying a broom finish

TABLE 1 PHYSICAL PROPERTIES

Property & test	Results
Setting time, ASTM C191	20 - 40 min.
Compressive strength, ASTM C39	
2 hrs	400 psi (2.8 MPa)
24 hrs	1000 psi (6.9 MPa)
7 days	2500 psi (17.2 MPa)
28 days	4000 psi (27.6 MPa)



Note - For best results, do not overwork the material. QUIKRETE Fast-Setting Concrete is walkable in 2 hours. Wait at least 4 hours before placing heavy objects on the slab.

CURING

General

Curing is one of the most important steps in concrete construction. Proper curing increases the strength and durability of concrete. Proper water content and temperature are essential for good curing. In near freezing temperatures, the hydration process slows considerably. When weather is too hot, dry or windy, water is lost by evaporation from the concrete and hydration stops, resulting in finishing difficulties and cracks. The ideal circumstances for curing are ample moisture and moderate temperature and wind conditions.

Specific Methods

Because QUIKRETE Fast-Setting Concrete is often used a few hours after placement, initial curing is very important. The most convenient curing method is to cover the concrete with plastic.

6. Availability

QUIKRETE Fast-Setting Concrete is available at leading concrete construction supply houses and distributors. Contact QUIKRETE Construction Products for the name of the nearest dealer.

7. Warranty

The QUIKRETE Companies warrant this product to be of merchantable quality when used or applied in accordance with the instructions herein. The product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is limited to the replacement of its product (as purchased) found to be defective, or at the shipping companies' option, to refund the purchase price. In the event of a claim under this warranty, notice must be given to The QUIKRETE Companies in writing. This limited warranty is issued and accepted in lieu of all other express warranties and expressly excludes liability for consequential damages.

8. Maintenance

None required.

9. Technical Services

The QUIKRETE Companies maintain technical field representatives throughout the country. Contact a local distributor for the name and

number of the nearest representative or call QUIKRETE Construction Products.

10. Filing Systems

Additional product information is available from the manufacturer.

Portland Cement Based Concrete Products

MATERIAL SAFETY DATA SHEET (Complies with OSHA 29 CFR 1910.1200)

SECTION I: PRODUCT IDENTIFICATION

The QUIKRETE® Companies
One Securities Centre
3490 Piedmont Road, Suite 1300
Atlanta, GA 30329

Emergency Telephone Number
(770) 216-9580

Information Telephone Number
(770) 216-9580

MSDS J1
Revision: Feb-09

HEALTH		1
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION Safety Glasses, Gloves and Dust Respirator		

<u>QUIKRETE® Product Name</u>	<u>Code #</u>
CONCRETE MIX	1101
FENCE POST MIX	1005
FIBER-REINFORCED CONCRETE MIX	1006
CRACK RESISTANT CONCRETE MIX	1006-80
QUIKRETE 5000 CONCRETE MIX	1007
LIGHTWEIGHT CONCRETE MIX	1008
HANDICRETE CONCRETE MIX	1141
B-CRETE	1101-81
PRO-FINISH QUIKRETE 5000	1007-85
BASIC CONCRETE MIX	1015
RIP RAP	1129
ALL-STAR CONCRETE MIX	1122
RIP RAP SCRIM	1134-80
FIBER REINFORCED DECK MIX	1250-80
PRO-FINISH CRACK RESISTANT CONCRETE MIX	1006-68
COUNTERTOP MIX	1106-80
RITEMIX CONCRETE	1171-60
GREEN CONCRETE MIX	1101-63

Product Use: Portland cement-based, aggregated products for general construction

SECTION II - HAZARD IDENTIFICATION

Route(s) of Entry: Inhalation, Skin, Ingestion

Acute Exposure: Product becomes alkaline when exposed to moisture. Exposure can dry the skin, cause alkali burns and affect the mucous membranes. Dust can irritate the eyes and upper respiratory system. Toxic effects noted in animals include, for acute exposures, alveolar damage with pulmonary edema.

Chronic Exposure: Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis.

CEMENT & CONCRETE PRODUCTS™

Carcinogenicity: Since Portland cement and blended cements are manufactured from raw materials mined from the earth (limestone, marl, sand, shale, etc.) and process heat is provided by burning fossil fuels, trace, but detectable, amounts of naturally occurring, and possibly harmful, elements may be found during chemical analysis. Under ASTM standards, Portland cement may contain 0.75 % insoluble residue. A fraction of these residues may be free crystalline silica. Respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs and possibly cancer. There is evidence that exposure to respirable silica or the disease silicosis is associated with an increased incidence of Scleroderma, tuberculosis and kidney disorders.

Carcinogenicity Listings:	NTP:	Known carcinogen
	OSHA:	Not listed as a carcinogen
	IARC Monographs:	Group 1 Carcinogen
	California Proposition 65:	Known carcinogen

NTP: The National Toxicology Program, in its "Ninth Report on Carcinogens" (released May 15, 2000) concluded that "Respirable crystalline silica (RCS), primarily quartz dusts occurring in industrial and occupational settings, is *known to be a human carcinogen*, based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to RCS and increased lung cancer rates in workers exposed to crystalline silica dust (reviewed in IAC, 1997; Brown *et al.*, 1997; Hind *et al.*, 1997)

IARC: The International Agency for Research on Cancer ("IARC") concluded that there was "*sufficient evidence* in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "*sufficient evidence* in experimental animals for the carcinogenicity of quartz or cristobalite." The overall IARC evaluation was that "crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is *carcinogenic to humans* (Group 1)." The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances or studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates." (1997)

Signs and Symptoms of Exposure: Symptoms of excessive exposure to the dust include shortness of breath and reduced pulmonary function. Excessive exposure to skin and eyes especially when mixed with water can cause caustic burns as severe as third degree.

Medical Conditions Generally Aggravated by Exposure: Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure. Exposure to crystalline silica or the disease silicosis is associated with increased incidence of scleroderma, Tuberculosis and possibly increased incidence of kidney lesions.

Chronic Exposure: Dust can cause inflammation of the lining tissue of the interior of the nose and inflammation of the cornea. Hypersensitive individuals may develop an allergic dermatitis. (May contain trace (<0.05 %) amounts of chromium salts or compounds including hexavalent chromium, or other metals found to be hazardous or toxic in some chemical forms. These metals are mostly present as trace substitutions within the principal minerals)

Medical Conditions Generally Aggravated by Exposure: Individuals with sensitive skin and with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure.

SECTION III - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

Hazardous Components	CAS No.	PEL (OSHA) mg/M ³	TLV (ACGIH) mg/M ³
Portland Cement	65997-15-1	5	5
Lime	01305-62-0	5	5
Silica Sand, crystalline	14808-60-7	<u>10</u> %SiO ₂ +2	0.05 (respirable)
May contain one or more of the following ingredients:			
Amorphous Silica (From fly Ash)	07631-86-9	<u>80</u> %SiO ₂ +2	10
Alumina (From Fly Ash)	01344-28-1	5	5
Limestone Dust	01317-65-3	5	5
Calcium Sulfate	10101-41-4 or 13397-24-5	5	5

Other Limits: National Institute for Occupational Safety and Health (NIOSH). Recommended standard maximum permissible concentration=0.05 mg/M³ (respirable free silica) as determined by a full-shift sample up to 10-hour working day, 40-hour work week. See NIOSH Criteria for a Recommended Standard Occupational Exposure to Crystalline Silica.

SECTION IV – First Aid Measures

Eyes: Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

Skin: Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

Inhalation: Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalations of large amounts of Portland cement require immediate medical attention.

Ingestion: Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

SECTION V - FIRE AND EXPLOSION HAZARD DATA

Flammability: Noncombustible and not explosive.

Auto-ignition Temperature: Not Applicable

Flash Points: Not Applicable

SECTION VI – ACCIDENTAL RELEASE MEASURES

If spilled, use dustless methods (vacuum) and place into covered container for disposal (if not contaminated or wet). Use adequate ventilation to keep exposure to airborne contaminants below the exposure limit.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND STORAGE

Do not allow water to contact the product until time of use. DO NOT BREATHE DUST. In dusty environments, the use of an OSHA, MSHA or NIOSH approved respirator and tight fitting goggles is recommended.

SECTION VIII – EXPOSURE CONTROL MEASURES

Engineering Controls: Local exhaust can be used, if necessary, to control airborne dust levels.

Personal Protection: The use of barrier creams or impervious gloves, boots and clothing to protect the skin from contact is recommended. Following work, workers should shower with soap and water. Precautions must be observed because burns occur with little warning -- little heat is sensed.

WARN EMPLOYEES AND/OR CUSTOMERS OF THE HAZARDS AND REQUIRED OSHA PRECAUTIONS ASSOCIATED WITH THE USE OF THIS PRODUCT.

Exposure Limits: Consult local authorities for acceptable exposure limits

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Appearance: Gray to gray-brown colored powder; Some products contain coarse aggregates.

Specific Gravity: 2.6 to 3.15

Melting Point: >2700°F

Boiling Point: >2700°F

Vapor Pressure: Not Available

Vapor Density: Not Available

Evaporation Rate: Not Available

Solubility in Water: Slight

Odor: Not Available

SECTION X - REACTIVITY DATA

Stability: Stable.

Incompatibility (Materials to Avoid): Contact of silica with powerful oxidizing agents such as fluorine, chlorine trifluoride, manganese trioxide, or oxygen difluoride may cause fires

Hazardous Decomposition or By-products: Silica will dissolve in Hydrofluoric Acid and produce a corrosive gas – silicon tetrafluoride.

Hazardous Polymerization: Will Not Occur.

Condition to Avoid: Keep dry until used to preserve product utility.

SECTION XI – TOXICOLOGICAL INFORMATION

Routes of Entry: Inhalation, Ingestion

Toxicity to Animals:

LD50: Not Available

LC50: Not Available

Chronic Effects on Humans: Conditions aggravated by exposure include eye disease, skin disorders and Chronic Respiratory conditions.

Special Remarks on Toxicity: Not Available

SECTION XII – ECOLOGICAL INFORMATION

Ecotoxicity: Not Available

BOD5 and COD: Not Available

Products of Biodegradation: Not available

Toxicity of the Products of Biodegradation: Not available

Special Remarks on the Products of Biodegradation: Not available

SECTION XIII – DISPOSAL CONSIDERATIONS

Waste Disposal Method: The packaging and material may be land filled; however, material should be covered to minimize generation of airborne dust. This product is not classified as a hazardous waste under the authority of the RCRA (40CFR 261) or CERCLA (40CFR 117&302).

SECTION XIV – TRANSPORT INFORMATION

Not hazardous under U.S. DOT and TDG regulations.

SECTION XV – OTHER REGULATORY INFORMATION

US OSHA 29CFR 1910.1200: Considered hazardous under this regulation and should be included in the employers' hazard communication program

SARA (Title III) Sections 311 & 312: Qualifies as a hazardous substance with delayed health effects

SARA (Title III) Section 313: Not subject to reporting requirements

TSCA (May 1997): Some substances are on the TSCA inventory list

Federal Hazardous Substances Act: Is a hazardous substance subject to statutes promulgated under the subject act

Canadian Environmental Protection Act: Not listed

Canadian WHMIS Classification: Considered to be a hazardous material under the Hazardous Products Act as defined by the Controlled Products Regulations (Class D2A, E- Corrosive Material) and subject to the requirements of Health Canada's Workplace Hazardous Material Information (WHMIS). This product has been classified according to the hazard criteria of the Controlled Products Regulation (CPR). This document complies with the WHMIS requirements of the Hazardous Products Act (HPA) and the CPR.

SECTION XVI – OTHER INFORMATION

HMIS-III:

Health –	0 = No significant health risk
	1 = Irritation or minor reversible injury possible
	2 = Temporary or minor injury possible
	3 = Major injury possible unless prompt action is taken
	4 = Life threatening, major or permanent damage possible
Flammability-	0 = Material will not burn
	1 = Material must be preheated before ignition will occur
	2 = Material must be exposed to high temperatures before ignition
	3 = Material capable of ignition under normal temperatures
	4 = Flammable gases or very volatile liquids; may ignite spontaneously
Physical Hazard-	0 = Material is normally stable, even under fire conditions

- 1 = Material normally stable but may become unstable at high temps
- 2 = Materials that are unstable and may undergo react at room temp
- 3 = Materials that may form explosive mixtures with water
- 4 = Materials that are readily capable of explosive water reaction

Abbreviations:

ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstract Service
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
CPR	Controlled Products Regulations (Canada)
DOT	Department of Transportation
IARC	International Agency for Research
MSHA	Mine Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicity Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TWA	Time-weighted Average
WHMIS	Workplace Hazardous Material Information System

Revision #07-01, supersedes all previous revisions

Created: 10/25/2006

Last Updated: February 25, 2009

NOTE: The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to silica contained in our products.