






SAFETY DATA SHEET

READY MIX CONCRETE

SECTION 1. IDENTIFICATION

Product Name: Concrete, Ready Mix Concrete	
Synonyms and Other Identification Freshly mixed unhardened concrete, Portland cement concrete, concrete, mud, grout, pump mix, flowable fill, shotcrete, gunite, colored concrete, various trade names and mix-specific codes	
Recommended Use: Building material for structural components and surface material applications	
Recommended Restrictions: None Known	
Manufacturer / Contact Info: Blalock Ready Mix / Newport Paving & Ready Mix PO Box 4750 Sevierville, TN 37862	General Phone Number: 865-453-2808 Poison Help Line 800-222-1222 Website: www.blalockcompanies.com

SECTION 2. HAZARD IDENTIFICATION

Signal Word: DANGER	Health Hazards: Skin Corrosion / Irritation (Category 2) Serious Eye Damage / Irritation (Category 1) Skin Sensitization (Category 1) Specific Target Organ Toxicity-Single Exposure (Cat. 3) Specific Target Organ Toxicity-Repeat Exposure (Cat. 2) Carcinogenicity (Category 1)
Hazard Pictograms:   	
Hazard Statement: May cause severe skin irritation or burns and eye damage May cause cancer (inhalation) (Repeated, prolonged specific exposure, see Section 11) May cause respiratory irritation May cause damage to organs (lungs) through prolonged or repeated exposure by inhalation	

Precautionary Statements:**Prevention:**

Use personal protective equipment, including gloves, eye protection, and face shields.
 Wear pants, long sleeves, and water resistant footwear.
 Do not breathe dust, fumes, or vapors. Use ventilation when handling indoors.
 Avoid prolonged skin contact and wash hands thoroughly after handling.

Response:

For exposure on skin: Seek medical attention or advice if irritation or rash occurs.
 Remove contaminated clothing and rinse/wash skin thoroughly with water.
 For exposure in eyes: Rinse continuously with water for several minutes.
 Remove contact lenses, if present and easy to do.
 For exposure by swallowing: Rinse mouth and DO NOT induce vomiting.
 For exposure by inhalation: Remove victim to fresh air and keep in resting position for breathing.

Disposal:

Dispose of contents/containers in accordance with all application regulations.

Supplemental Information:

Ready mix concrete contains naturally occurring minerals with varying quantities of quartz (crystalline silica). Respirable Crystalline Silica (RCS) may cause cancer. Wet, freshly mixed concrete is not expected to pose respiratory concerns. Hardened ready mix concrete may be subjected to forces that create small dust particles that may contain respirable crystalline silica (particles smaller than 10 micrometers in aerodynamic diameter). Repeated inhalation of respirable crystalline silica may cause lung cancer according to IARC, NTP; ACGIH states that it is a suspected cause of cancer.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	% by Weight (Approx.)
Aggregate (crushed limestone, sand, gravel, expanded shale)	1317-65-3	0-90
Crushed quartz, sand, gravel	14808-60-7	0-90
Portland / Slag Cement	65997-15-1	0-30
Pozzolans	Mixture	0-30
Fly Ash	38131-74-8	
Metakaolin	1332-58-7	
Silica Fume	69012-64-2	
Water	7732-18-5	>5

SECTION 4. FIRST AID MEASURES**Inhalation:**

Dust from hardened concrete products may irritate the mouth, nose, throat and lungs if inhaled. Remove person to fresh air. Dust in throat and nasal passages should clear naturally. Contact a physician if irritation persists.

Eye Contact:

Immediately flush eyes with continuous water for 15 minutes or longer with eyelids held open. Other than washing with water, do not attempt to remove material from eyes. Do not allow victim to rub eyes. Remove contact lenses if present and easy to do. Seek medical attention.

Skin Contact:	Wash affected area with soap and water. Remove contaminated clothing immediately and wash before reuse. Contact a physician if irritation persists.								
Ingestion:	Ingestion is not a common route of exposure. If ingestion does occur, do not induce vomiting. Contact a physician if irritation persists.								
Most Important Symptoms / Effect, Acute and Delayed:	<table> <tr> <td>Eye Contact:</td> <td>May cause serious eye damage, pain, burns, redness, or watering</td> </tr> <tr> <td>Inhalation:</td> <td>May cause respiratory irritation; prolonged exposure to dust may cause silicosis</td> </tr> <tr> <td>Skin Contact:</td> <td>May cause pain, swelling, irritation, severe burns, blistering, or allergic reaction</td> </tr> <tr> <td>Ingestion:</td> <td>May cause pain and burns to mouth, throat, and stomach</td> </tr> </table>	Eye Contact:	May cause serious eye damage, pain, burns, redness, or watering	Inhalation:	May cause respiratory irritation; prolonged exposure to dust may cause silicosis	Skin Contact:	May cause pain, swelling, irritation, severe burns, blistering, or allergic reaction	Ingestion:	May cause pain and burns to mouth, throat, and stomach
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Over-Exposure Signs/Symptoms	<table> <tr> <td>Eye Contact:</td> <td>Pain, watering, redness</td> </tr> <tr> <td>Inhalation:</td> <td>Respiratory tract irritation, coughing</td> </tr> <tr> <td>Skin Contact:</td> <td>Pain, irritation, redness, blistering</td> </tr> <tr> <td>Ingestion:</td> <td>Stomach pain</td> </tr> </table>	Eye Contact:	Pain, watering, redness	Inhalation:	Respiratory tract irritation, coughing	Skin Contact:	Pain, irritation, redness, blistering	Ingestion:	Stomach pain
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Indication of Immediate Medical Attention and Special Treatment Needed, If Necessary	<table> <tr> <td>Notes to Physician:</td> <td>Treat symptomatically and provide supportive measures. Keep victim under observation as symptoms may be delayed. Contact poison treatment specialist if large quantities have been inhaled or ingested.</td> </tr> <tr> <td>Specific Treatment:</td> <td>None Applicable</td> </tr> <tr> <td>Protection for First Aid:</td> <td>Ensure medical personnel are aware of materials involved and take precautions to limit exposure.</td> </tr> </table> <p>See toxicological information (Section 11)</p>	Notes to Physician:	Treat symptomatically and provide supportive measures. Keep victim under observation as symptoms may be delayed. Contact poison treatment specialist if large quantities have been inhaled or ingested.	Specific Treatment:	None Applicable	Protection for First Aid:	Ensure medical personnel are aware of materials involved and take precautions to limit exposure.		
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Specific Treatment:	None Applicable								
Protection for First Aid:	Ensure medical personnel are aware of materials involved and take precautions to limit exposure.								

SECTION 5. FIRE FIGHTING MEASURES

Suitable Extinguisher Media:	Not combustible. Use media suitable for surrounding flammable material.
Unsuitable Extinguisher Media:	None known
Specific Hazards Arising from Chemical:	Not combustible or flammable
Special Protective Equipment and Precautions for Firefighters:	Use equipment appropriate for surrounding materials.
Firefighting Equipment / Instructions:	Not flammable. Use equipment appropriate for surrounding materials.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures:	Refer to Section 8 for exposure controls. Keep unprotected personnel out of the area. Do not sweep dusty material. Observe all applicable laws governing waste disposal.
Environmental Precautions:	Clean spilled material immediately. Contain spill and wash water to prevent entering public waterways. Remove wet concrete from roadways immediately. Do not sweep dusty material.

Methods and Materials for Containment and Clean Up:

Wear alkali resistant gloves, long sleeves, long pants, and safety glasses when removing wet concrete. Respiratory equipment is recommended when removing dried concrete or in contact with concrete dust. Do not sweep dusty material.

SECTION 7. HANDLING AND STORAGE**Precautions for Safe Handling:**

Use personal protective equipment as described in Section 8 to avoid direct contact. Use wet cutting methods to avoid dust generation.

Conditions for Safe Storage, Including Any Incompatibilities:

Store away from moisture, acids, foods, and beverages. Avoid releases to waterways.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION**Control Parameters--Occupational Exposure Limits**

Component	OSHA/MSHA PEL	ACGIH TLV	NIOSH REL
Portland Cement	15 mg/m ³ Total Dust 5 mg/m ³ Respirable	1 mg/m ³ Respirable	10 mg/m ³ Total Dust 5 mg/m ³ Respirable
Crystalline Silica (quartz)	30 mg/m ³ Total Dust Table Z-3 10 mg/m ³ Respirable Table Z-3	.025 mg/m ³ Respirable	.05 mg/m ³ Respirable
Limestone	15 mg/m ³ Total Dust 5 mg/m ³ Respirable		10 mg/m ³ Total Dust 5 mg/m ³ Respirable
Particulates Not Classified	15 mg/m ³ Total Dust 5 mg/m ³ Respirable	10 mg/m ³ Total Dust 3 mg/m ³ Respirable	

Each ingredient may contain varying amounts of crystalline silica as a component. Silica exposure may occur when respirable dust is present; however, dust is not present in unhardened ready mix concrete.

Exposure Guidelines:

Respirable dust and quartz levels should be monitored and controlled when generating dust from hardened concrete. Exposure levels in excess of allowable exposure limits should be reduced by all feasible engineering controls, including wet suppression, ventilation, process enclosure, and enclosed employee workstations.

Engineering Controls:

Controls are not normally needed for wet concrete. Activities that generate dust from hardened concrete may require the use of ventilation, local exhaust, and/or wet suppression to reduce exposure to silica dust.

Eye Protection:

Safety glasses with side shields should be worn as minimum protection. Goggles or face shields should be worn when spashing or dusting is possible.

Skin Protection (Protective Gloves/Clothing)

Waterproof, alkali resistant gloves, rubber boots, and clothing sufficient to protect against contact with wet concrete should be worn. Contaminated or saturated clothing should be removed immediately and washed before reuse. Wash hands thoroughly with soap and water after handling product.

Respiratory Protection

Ordinarily not required when working with wet concrete. Activities generating dust from hardened concrete require the use of an appropriate NIOSH approved respirator. Respirator selection should be based on known or anticipated work conditions, hazards, and exposure levels. The need for and fit of a respirator should be evaluated by a qualified safety and health professional. Users should be instructed on proper use before wearing a respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Gray, plastic, flowable, granular mixture or paste

Odor: Faint, characteristic cement odor	PH: Approximately 12	Decomposition Temperature: N/A
Melting Point / Freezing Point: N/A	Initial Boil Point and Boil Range: N/A	Flash Point: Non-combustible
Evaporation Rate: N/A	Flammability: N/A	Flammability or Explosion Limits: N/A
Vapor Pressure: N/A	Relative Density: Wet Concrete 1.9-2.6	Solubility: 0.1-1%
Partition Coefficient: n-octanol / water: N/A	Autoignition Temperature: N/A	Specific Gravity (H2O=1) 1.7-3.0

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

Stable, not reactive under normal use

Chemical Stability:

Stable under normal handling temperatures and pressure

Possibility of Hazardous Reactions:

None under normal use, polymerization will not occur

Conditions to Avoid:

Avoid contact with incompatible materials listed below

Incompatible Materials:

Fresh concrete is caustic (pH approximately 12) and could react with strong acids, aluminum, ammonium salts, alkali earth compounds, and oxidizing materials. Reactions with acids can produce violent heat generations and/or toxic vapors. Reactions with aluminum powder or alkali earth compounds can generate hydrogen gas vapors. Silica found in limestone reacts with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride and with acids, alum, ammonium salts, and magnesium. These reactions could cause fire and/or explosions. Silica dissolves readily in hydrofluoric acid producing silicon tetrafluoride, a corrosive gas.

Hazardous Decomposition Products:

None under normal use

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Not reported to be acutely toxic

Irritation / Corrosion:

Skin: May cause skin irritation, burns, or skin ulcers
 Eyes: May cause eye irritation or serious eye damage
 Respiratory: None under normal use with wet concrete. Dust particles from hardened concrete created by grinding, sawing, or other methods may contain respirable crystalline silica. Dust may irritate the mouth, nose, throat, and lungs, causing coughing, sneezing, and shortness of breath. Prolonged exposure to respirable crystalline silica may increase risk of silicosis, lung cancer, autoimmune diseases, and kidney disorders.

Sensitization: Rare, slight potential due to possible trace levels of hexavalent chromium

Mutagenicity: No data available

Carcinogenicity: See chart below

Product	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Portland Cement	-	-	-	A4	-	-
Crystalline Silica (Quartz)	-	1	Known human carcinogen	A2	-	+

Specific Target Organ Toxicity (Single Exposure)

Product	Category	Exposure Route	Target Organs
Portland Cement	3	Inhalation	Respiratory irritation
Crystalline Silica (Quartz)	1	Inhalation	None reported

Specific Target Organ Toxicity (Repeated Exposure)

Product	Category	Exposure Route	Target Organs
Crystalline Silica (Quartz)	1	Inhalation	May cause lung damage

Aspiration Hazard:

Unlikely due to physical form of the product

Primary Routes of Exposure:

Contact with skin and eyes, inhalation

Potential Acute Health Effects:

Eye Contact: May cause eye irritation or serious eye damage
 Inhalation: May cause respiratory irritation
 Skin Contact: May cause skin irritation, burns, or skin ulcers
 Ingestion: May cause burns to mouth, throat, and stomach

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics

Eye Contact: Pain, redness, watering, swelling
 Inhalation: Respiratory irritation, coughing, sneezing, shortness of breath
 Skin Contact: Pain, irritation, redness, swelling, blistering
 Ingestion: Stomach pain

Potential Chronic Health Effects (General)

Prolonged, repeated exposure (inhalation) of respirable crystalline silica may be harmful to the lungs. There are reports suggesting that excessive crystalline silica exposure may be associated with autoimmune diseases and kidney disorders. Prolonged, repeated exposure has also been linked to increase risk of scleroderma. To date, evidence does not conclusively determine a causal relationship between silica exposure and these health issues. For individuals sensitized to hexavalent chromium, severe allergic dermal reaction is possible even when exposed to very low levels that may be present in concrete.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:	No Available Data
Persistence and Degradability:	No Available Data
Bioaccumulative Potential	No Available Data
Mobility in Soil:	No Available Data
Other Adverse Effects:	No known significant effects or critical hazards

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Instructions

Generation of waste should be avoided or minimized whenever possible. Recycle when possible. Disposal of this product and any by-product should comply with all local, state, and federal laws and should be done through a licensed waste disposal contractor. Untreated waste should not be released into sewer systems unless fully compliant with applicable laws in the jurisdiction. Avoid release of spilled material and wash-out runoff into waterways, drains, and sewers.

SECTION 14. TRANSPORT INFORMATION

DOT:	Not regulated
IATA:	Not regulated
IMDG:	Not regulated
AERG:	Not regulated

Special Precautions for User:

It is the responsibility of the transporting entity and driver to follow all applicable laws, regulations, and rules regarding transport. Persons transporting the product must know what to do in the event of an accident or spillage.

SECTION 15. REGULATORY INFORMATION

U.S. Federal Regulations:

TSCA Section 6 Final Risk Mgmt:	Chromium, ion (Cr6+)
TSCA Section 8 (b) U.S. Inventory:	All components listed or exempt
TSCA Section 12(b) Export Notification:	Not Regulated
OSHA Hazard Communication Standard:	"Hazardous Chemical" as defined by OSHA
OSHA Specifically Regulated Substances:	Not Listed
Clean Water Act (CWA) 307:	Chromium, ion (Cr6+)
CERCLA Hazardous Substance List:	Not Listed
Clean Air Act Section 112b HAPS:	Not Regulated
Clean Air Act Section 112r Release:	Not Regulated
Clean Air Act Section 602 Class I:	Not Listed
Clean Air Act Section 602 Class II:	Not Listed
Safe Drinking Water Act (SDWA):	Not Regulated
DEA List I Chemicals (Precursor):	Not Listed
DEA List II Chemicals (Essential):	Not Listed

SARA 302 / 304:

Product contains no extremely hazardous substances. SARA 304RQ not applicable

SARA 311 / 312 Classification:

Immediate (acute) health hazard; Delayed (chronic) health hazard

Composition / Information on Ingredients

Name	%	Fire Hazard	Sudden Pressure Release	Reactive	Acute Health Hazard	Chronic Health Hazard
Crystalline Silica	>1	No	No	No	No	Yes

SARA 313:

	Product Name	CAS Number	%
Form R-Report Requirements	Crystalline Silica (Quartz)	14808-60-7	Not Regulated

California Proposition 65:

WARNING: This product contains crystalline silica and chemicals known to the State of California to cause cancer.

U.S. State Regulations:

Massachusetts: Crystalline silica, quartz, limestone, cement
 New Jersey: Crystalline silica, quartz, limestone, cement
 Pennsylvania: Crystalline silica, quartz, limestone, cement
 Rhode Island: Crystalline silica, quartz, limestone, cement

SECTION 16. OTHER INFORMATION

Issue Date: 6/1/2015

Last Revision Date and Version Number: 1/13/2024 Version 3

Disclaimer

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR OTHERWISE.

To the best of our knowledge and ability, the information contained herein is accurate. However, Blalock Lumber Company, LP dba Blalock Ready Mix, A&W Ready Mix, LLC., Newport Paving Company, Inc., and Newport Ready Mix, LLC (referred to collectively as "Blalock") do not assume any liability whatsoever for the accuracy or completeness of the information in this Safety Data Sheet or its application in the field. This Safety Data Sheet is believed to provide a useful summary of hazards of ready mix concrete under normal use; however, the sheet cannot anticipate all possible conditions. Final determination of suitability for use is the sole responsibility of the user. Furthermore, the information in this Safety Data Sheet is not intended as and should not be construed as legal advice or as ensuring compliance with any local, state, or federal law. Any party should review all applicable laws and regulations prior to use.

This Safety Data Sheet represents typical ingredients and quantities for concrete constituents. Actual ingredients and quantities may vary among mix designs as required by product applicability, use, and project specifications. Information on specific constituents and quantities are available from Blalock upon request. The information in this Safety Data Sheet relates only to the specific materials designated herein and does not apply to the product's uses in combinations with other materials.

Ready mix concrete is intended for use by persons having technical skills and knowledge related to the product. Any application is at the user's own discretion and risk. Since conditions will exist during use that are outside of the producer's control, Blalock makes no warranties, expressed or implied, and assumes no liability related to the use of this product. It is the user's sole responsibility to investigate other available information regarding the safe handling, legal use, and suitable applications of this product. Buyer's exclusive remedy shall be for damages with no claim of any kind exceeding the purchase price of the quantity of product related directly to the claim. In no event shall Blalock be liable for incidental or consequential damages related to the use of this product.

For Further Information, Contact:

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