1341 W. Mockingbird Lane
Dallas, TX 75247

HMIS

HEALTH	1
FIRE	0
PHYSICAL HAZARD	0
PPE	X

TXI Operations, LP

Material Safety Data Sheet

Hydrated Lime 50 lb.

UPC #094138051959

SECTION 1 – IDENTITY

Distributed by: TXI Operations, LP
Address: 1341 W. Mockingbird Lane
Dallas, TX 75247
Product Name: Hydrated Lime
Common Name: Calcium Hydroxide
Chemical Name: Calcium Hydroxide
Chemical Family: Alkaline Earth Hydroxide
Formula: $Ca(OH)_2$

Emergency Phone (CHEMTREC): 800-424-9300
Outside USA: 703-527-3887
Telephone for Information: Don Bell
972-647-7088
Telephone for Emergency: CHEMTREC
800-424-9300

Trade Name and Synonyms: Hydrate, High Calcium Hydrate Lime, Type N Hydrated Lime, HL
Special Certification: None

MSDS prepared: June 2010 **Last revised:** N/A

SECTION 2 – COMPOSITION AND INFORMATION ON INGREDIENTS

Name	CAS #	%Typical	TLV (Units)	PEL (Units)
Calcium Hydroxide, $Ca(OH)_2$	1305-62-0	>90	5 mg/m^3	5 mg/m^{3*} 15 mg/m^{3**}
Magnesium Hydroxide, $Mg(OH)_2$ (Brucite)	1309-42-8	<5	N/A	N/A
Magnesium Oxide, MgO (Periclase)	1309-48-4	<5	10 mg/m^3	10 mg/m^3
Calcium Carbonate $CaCO_3$ (Limestone)	1317-65-3 (471-34-1)	<3	10 mg/m^3	5 mg/m^{3*} 15 mg/m^{3**}
Crystalline Silica, SiO_2 (Quartz)	14808-60-7	<2	0.025 mg/m^{3*}	10 mg of Respirable Dust/ % SiO2 + 2 30 mg of Total Dust/ % SiO2 + 2

***** Respirable Fraction ******Total Dust

TLV: Threshold Limit Value established by the American Conference of Governmental Industrial Hygienists (ACGIH).
PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration (OSHA).
This material, if it becomes a waste, is not classified as a RCRA hazardous waste (40 CFT 261).
OSHA Regulatory Status: This material is subject to 29 CFR 1910.1200 (Hazard Communication).

SECTION 3 – PHYSICAL DATA

Appearance and Odor: White or grayish-white powder. No odor.
Boiling Point: 5162
Percent Volatile by Volume: N/A
Percent Soluble in Water: Slight (0.185 – 0.077)
Specific Gravity (H_20=1): 2.20 – 2.40
Vapor Density (Air=1): N/A
Reactivity in Water: Will not evolve flammable or toxic gases
Freezing Point: N/A
Vapor Pressure (mmHg): N/A
Evaporation Rate (n-Butyl Acetate=1): N/A
Volatile Organic Content: N/A

SECTION 4 – FIRE AND EXPLOSION DATA

Flash Point: Will not ignite
Auto Ignition Temperature: N/A
Extinguishing Media: Use dry chemical fire extinguisher. Do not use water or halogenated compounds, except the large amounts of water may be used to deluge small quantities of hydrate.
Unusual Fire and Explosion Hazards: Hydrate is not combustible or flammable. However, hydrate reacts vigorously with acids, and may release heat sufficient to ignite combustible materials in specific instances. Hydrate is not considered to be an explosion hazard, although reaction with acids or other incompatible materials may rupture containers.
Special Fire Fighting Procedures: Keep personnel away from and upwind of fire. Avoid skin contact or inhalation of dust. Wear full fire-fighting turn-out gear (full Bunker gear), and respiratory protection (SCBA).
Flammable Limits in Air (% by Volume)
Lower: N/A
Upper: N/A

SECTION 5 – HEALTH INFORMATION

HMIS Rating:

HEALTH	**1**
FIRE	**0**
PHYSICAL HAZARD	**0**
PPE	**X**

(0 = Minimal, 1 = Slight, 2 = Moderate, 3 = Serious, 4 = Severe, * = Chronic Health Hazard)

Signs and Symptoms of Exposure

Acute Overexposure:

Inhalation:
Can cause irritation to the respiratory system.

Eye Contact:
Can cause irritation to the eyes.

Skin Contact:
Can cause irritation to the skin.

Ingestion:
Can cause irritation to the gastrointestinal tract.

Chronic Overexposure:

Inhalation:
This product can cause severe irritation of the respiratory system. Long-term exposure may cause permanent damage. Hydrate is not listed by MSHA, OSHA or IARC as a carcinogen. However, this product may contain trace amounts of crystalline silica in the form of quartz or crystobalite, which has been classified by IARC as a Group I carcinogen to humans when inhaled. Inhalation of silica over a long period of time can also cause a chronic lung disorder and silicosis.

Eye Contact:
Contact can cause severe irritation or burning of eyes, including permanent damage.

Skin Contact:
Can cause irritation of skin.

Ingestion:
This product can cause irritation to the gastrointestinal tract if swallowed.

Medical Conditions Generally Aggravated by Exposure
Contact may aggravate disorders of the eyes, skin, gastrointestinal tract and respiratory system.

Chemical/Component Listed as Carcinogen

	NTP	IARC	OSHA
Quartz:	YES	YES	YES

Other Exposure Limits
None

Emergency & First Aid Procedures for Indicated Routes of Entry

Inhalation: Move victim to fresh air. Seek medical attention. If breathing has stopped, give artificial respiration.

Eyes: Immediately flush eyes with generous amounts of water or eye wash solution if water is unavailable. Pull back eyelid while flushing to ensure that all lime dust has been washed out. Seek medical attention promptly if the initial flushing of the eyes does not remove the irritant. Do not rub eyes.

Skin: Brush off or remove as much dry lime as possible. Wash exposed area with large amounts of water. If irritation persists, seek medical attention promptly.

Ingestion: Do not induce vomiting. Seek medical attention immediately. Never give anything by mouth unless instructed to do so by medical personnel.

SECTION 6 – REACTIVITY DATA

Stability: Chemically stable, but slowly reacts with carbon dioxide to form calcium carbonate. See also incompatibility below.
Conditions to Avoid: See Incompatibility
Incompatibility: Hydrate should not be mixed or stored with the following materials due to the potential for vigorous reaction and release of heat: Acids (unless in a controlled process); organic acid anhydrides; reactive fluoridated compounds; nitro-organic compounds; reactive brominated compounds; reactive phosphorous compounds; reactive powdered metals; interhalogenated compounds.
Hazardous Polymerization: None
Hazardous Decomposition or Combustion Products: None

SECTION 7 – SPILL OR LEAK PROCEDURES

Steps to be Taken in Case Material is Leaked or Spilled:
Residual amounts of material can be flushed with large amounts of water. Equipment can be washed with either a mild vinegar and water solution, or a detergent and water.

Waste Disposal Method:
Dispose of in accordance with Federal, State and Local environmental regulations. If this product is supplied, and unmixed, becomes a waste, if will not meet the criteria of a hazardous waste as defined under the U.S. Resource Conversation and Recovery Act (40CFT 261).

SECTION 8 – PERSONAL PROTECTION INFORMATION

Respiratory Protection
NIOSH/MSHA approved respirators if airborne concentration exceeds PELs.

Ventilation
General or local exhaust to maintain exposure below TLV/PEL.

Protective Gloves
Cloth/leather gloves when handling dry product. Rubber gloves if wet or damp. Should lime get inside gloves, remove the gloves and the lime promptly.

Eye Protection
Use safety glasses with side shields or safety goggles. Contact lenses should not be worn when working with lime products.

Other Protective Clothing or Equipment
Use appropriate footwear to prevent skin contact. Clothing should fully cover arms and legs. Should lime get inside clothing, remove the clothing and the lime promptly.

SECTION 9 – SPECIAL PRECAUTIONS

Precautions to be Taken in Handling & Storing
Keep in tightly closed plastic or non-aluminum metal containers. Do not store or ship in aluminum containers. Protect containers from physical damage. Avoid direct skin contact with the material. Store in a cool, dry, and well-ventilated location. Do not store near acids or other incompatible materials. Keep away from moisture.

Other Precautions

DO NOT use water on bulk material spills. Use proper protective equipment.

Small Spills: Use dry methods to collect spilled materials. Avoid generating dusts. Do not clean-up with compressed air. Store collected materials in dry, sealed plastic or non-aluminum metal containers. Residue on surfaces may be water washed.
Large Spills: Use dry methods to collect spilled materials. Evacuate area downwind of clean-up operations to minimize dust exposure. Store spilled materials in dry, sealed plastic or non-aluminum metal containers.
Containment: Minimize dust generation and prevent bulk release to sewers or waterways.

SECTION 10 – OTHER INFORMATION

MSDS Contact Information:

Technical Contact:
972-647-7088

To Request a MSDS or Check for Updates:
972-647-3886

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall TXI Operations, LP, or its affiliates, be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if TXI Operations, LP, or its affiliates, have been advised of the possibility of such damages.