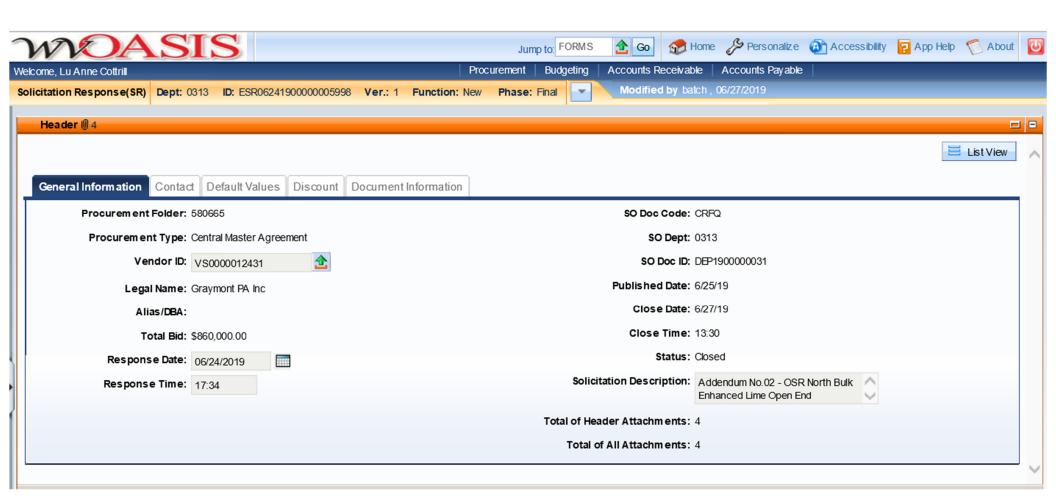
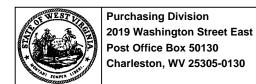


2019 Washington Street, East Charleston, WV 25305 Telephone: 304-558-2306 General Fax: 304-558-6026

Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at *wvOASIS.gov*. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at *WVPurchasing.gov* with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.





## State of West Virginia Solicitation Response

Proc Folder: 580665

Solicitation Description: Addendum No.02 - OSR North Bulk Enhanced Lime Open End

**Proc Type**: Central Master Agreement

Date issued Solicitation	on Closes   Solici	Solicitation Response Version	
2019-06- 13:30:00		0313 ESR06241900000005998	1

**VENDOR** 

VS0000012431

Graymont PA Inc

Solicitation Number: CRFQ 0313 DEP1900000031

**Total Bid:** \$860,000.00 **Response Date:** 2019-06-24 **Response Time:** 17:34:32

Comments: Graymont does not offer discounts

### FOR INFORMATION CONTACT THE BUYER

Brittany E Ingraham (304) 558-2157 brittany.e.ingraham@wv.gov

Signature on File FEIN # DATE

All offers subject to all terms and conditions contained in this solicitation

Page: 1 FORM ID: WV-PRC-SR-001

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Barbour County Enhanced Lime Small Truck (<10 Tons)	5.00000	TON		
Comm Code	Manufacturer	Specification		Model #	
47101600	manuracturer	Ореспісаціон		model #	
Extended Des	cription : Barbour County Enhanced	Lime Small Tru	ck (<10 Tons)	)	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Barbour County Enhanced Lime Large Truck (>10 Tons)	5.00000	TON		
Comm Code	Manufacturer	Specification		Model #	
47101600					
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
Line 3	Comm Ln Desc  Grant County Enhanced Lime Small Truck (<10 Tons)	<b>Qty</b> 5.00000	Unit Issue TON	Unit Price	Ln Total Or Contract Amount
3	Grant County Enhanced Lime Small			Unit Price  Model #	Ln Total Or Contract Amount
3 Comm Code	Grant County Enhanced Lime Small Truck (<10 Tons)	5.00000			Ln Total Or Contract Amount
3 Comm Code 47101600	Grant County Enhanced Lime Small Truck (<10 Tons)	5.00000 Specification	TON		Ln Total Or Contract Amount
Comm Code 47101600 Extended Des	Grant County Enhanced Lime Small Truck (<10 Tons)  Manufacturer	Specification  Specification  ime Small Truck	TON (<10 Tons)		Ln Total Or Contract Amount  Ln Total Or Contract Amount
Comm Code 47101600 Extended Des	Grant County Enhanced Lime Small Truck (<10 Tons)  Manufacturer  cription : Grant County Enhanced Lime	5.00000  Specification  ime Small Truck	TON (<10 Tons)	Model #	
Comm Code 47101600 Extended Des	Grant County Enhanced Lime Small Truck (<10 Tons)  Manufacturer  Cription: Grant County Enhanced Lime  Comm Ln Desc  Grant County Enhanced Lime Large	Specification  Specification  ime Small Truck	TON (<10 Tons)	Model #	

Line	Comm Ln	Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Marion Co Small True	ounty Enhanced Lime ck (<10 Tons)	5.00000	TON		
Comm Code	. Ma	nufacturer	Specification		Model #	
47101600			<u> </u>			
Extended De	escription :	Mariont County Enhanced L	ime Small Truc	k (<10 Tons)		
Line	Comm Ln		Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Marion Co Truck (>10	ounty Enhanced Lime Large 0 Tons)	600.00000	TON	\$200.000000	\$120,000.00
Comm Code	•	nufacturer	Specification		Model #	
47101600	· ivia	muracturer	opecinication		wouei #	
Co Line 7	Comm Ln  Mineral C	Marion County Enhanced L  Minimum 20-ton Truckloads  Desc  County Enhanced Lime ck (<10 Tons)			art maximum Unit Price	Ln Total Or Contract Amount
0			0		M1 -1 #	
Comm Code 47101600	· IVIa	nufacturer	Specification		Model #	
Extended De	escription :	Mineral County Enhanced L	ime Small Truc	k (<10 Tons)		
Line	Comm Ln Desc					
8	Mineral County Enhanced Lime Large Truck (>10 Tons)		Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
Comm Code	Largo Tra	ounty Enhanced Lime	<b>Qty</b> 5.00000	TON	Unit Price	Ln Total Or Contract Amount
	<u> </u>	ounty Enhanced Lime			Unit Price  Model #	Ln Total Or Contract Amount
47101600	<u> </u>	ounty Enhanced Lime ck (>10 Tons)	5.00000			Ln Total Or Contract Amount

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
9	Monongalia County Enhanced Lime Small Truck (<10 Tons)	5.00000	TON		
Comm Code	Manufacturer	Specification		Model #	
47101600		·			
Extended Des	Monongalia County Enhan	nced Lime Small <sup>-</sup>	Truck (<10 To	ons)	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
10	Monongalia County Enhanced Lime Large Truck (>10 Tons)	200.00000	TON	\$200.000000	\$40,000.00
Comm Code	Manufacturer	Specification		Model #	
47101600		-promoduon		modol ir	
Cor	mments: Minimum 20-ton Truckload	ls Split deliveries	30 miles apa	art maximum	
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
11	Preston County Enhanced Lime Small Truck (<10 Tons)	20.00000	TON		
Comm Code	Manufacturer	Specification		Model #	
47101600		•			
Extended Des	Scription : Preston County Enhanced	Lime Small Truc	k (<10 Tons)		
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
12	Preston County Enhanced Lime Large Truck (>10 Tons)	3500.00000	TON	\$200.000000	\$700,000.00
Comm Code	Manufacturer	Specification		Model #	
47101600		-			
Extended Des	scription : Preston County Enhanced	d Lime Large Tru	ck (>10 Tons	)	

Comments: Minimum 20-ton Truckloads Split Deliveries 30 miles apart maximum

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
13	Tucker County Enhanced Lime Small Truck (<10 Tons)	5.00000	TON		
Comm Code	Manufacturer	Specification		Model #	
47101600					
Extended Des	Tucker County Enhanced Li	me Small Truck	(<10 Tons)		
Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
14	Tucker County Enhanced Lime Large Truck (>10 Tons)	5.00000	TON		
Comm Code	Manufacturer	Specification		Model #	
47101600					
l ine	Comm I n Desc	Otv	Unit Issue	Unit Price	In Total Or Contract Amount
Line 15	Comm Ln Desc  UpsherCounty Enhanced Lime Small Truck (<10 Tons)	<b>Qty</b> 5.00000	Unit Issue TON	Unit Price	Ln Total Or Contract Amount
15	UpsherCounty Enhanced Lime Small			Unit Price  Model #	Ln Total Or Contract Amount
	UpsherCounty Enhanced Lime Small Truck (<10 Tons)	5.00000			Ln Total Or Contract Amount
15 Comm Code 47101600	UpsherCounty Enhanced Lime Small Truck (<10 Tons)	5.00000  Specification	TON		Ln Total Or Contract Amount
Comm Code 47101600 Extended Des	UpsherCounty Enhanced Lime Small Truck (<10 Tons)  Manufacturer	5.00000  Specification  ime Small Truc	TON k (<10 Tons)		Ln Total Or Contract Amount  Ln Total Or Contract Amount
Comm Code 47101600 Extended Des	UpsherCounty Enhanced Lime Small Truck (<10 Tons)  Manufacturer  Ceription: Upsher County Enhanced L	5.00000  Specification ime Small Truc	TON k (<10 Tons)	Model #	
Comm Code 47101600 Extended Des	UpsherCounty Enhanced Lime Small Truck (<10 Tons)  Manufacturer  cription: Upsher County Enhanced L  Comm Ln Desc  Upsher County Enhanced Lime Large	5.00000  Specification  ime Small Truc	TON k (<10 Tons)	Model #	
Comm Code 47101600  Extended Des Line 16	UpsherCounty Enhanced Lime Small Truck (<10 Tons)  Manufacturer  Ceription: Upsher County Enhanced Lime Lime Lime Lime Lime Lime Large Truck (>10 Tons)	Specification  ime Small Truc  Qty 5.00000	TON k (<10 Tons)	Model #	

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
17	Clay County Enhanced Lime Small Truck (<10 Tons)	5.00000	TON		

Comm Code	Manufacturer	Specification	Model #	
47101600				

**Extended Description:** 

Clay County Enhanced Lime Small Truck (<10 Tons)

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
18	Clay County Enhanced Lime Large Truck (>10 Tons)	200.00000	TON		

Comm Code	Manufacturer	Specification	Model #
47101600			

**Extended Description:** 

Clay County Enhanced Lime Large Truck (>10 Tons)

## REQUEST FOR QUOTATION OSR Bulk Enhanced Lime

- 7.1.4 Failure to remedy deficient performance upon request.
- 7.2 The following remedies shall be available to Agency upon default.
  - 7.2.1 Immediate cancellation of the Contract.
  - 7.2.2 Immediate cancellation of one or more release orders issued under this Contract.
  - 7.2.3 Any other remedies available in law or equity.

#### 8. MISCELLANEOUS:

- **8.1** No Substitutions: Vendor shall supply only Contract Items submitted in response to the Solicitation unless a contract modification is approved in accordance with the provisions contained in this Contract.
- 8.2 Vendor Supply: Vendor must carry sufficient inventory of the Contract Items being offered to fulfill its obligations under this Contract. By signing its bid, Vendor certifies that it can supply the Contract Items contained in its bid response.
- 8.3 Reports: Vendor shall provide quarterly reports and annual summaries to the Agency showing the Agency's items purchased, quantities of items purchased, and total dollar value of the items purchased. Vendor shall also provide reports, upon request, showing the items purchased during the term of this Contract, the quantity purchased for each of those items, and the total value of purchases for each of those items. Failure to supply such reports may be grounds for cancellation of this Contract.
- 8.4 Contract Manager: During its performance of this Contract, Vendor must designate and maintain a primary contract manager responsible for overseeing Vendor's responsibilities under this Contract. The Contract manager must be available during normal business hours to address any customer service or other issues related to this Contract. Vendor should list its Contract manager and his or her contact information below.

Contract Manager:	Charles Lucostic	
Telephone Number:	814-353-2121	
Fax Number:	814-353-1349	
Email Address:	clucostic@graymont.com	

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the
Contract Administrator and the initial point of contact for matters relating to this Contract.
Cally C Serodin, account Manager
(Name, Title)
Charles Lucostic / AccountManager
(Printed Name and Title)
194 Match Factory Place, Bellefonte PA 16823
(Address) 814-353-2121 / 814-353-1349
(Phone Number) / (Fax Number)
clucostic@graymont.com
(email address)
CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.
Graymont (PA) Inc.
(Company)
CURCE TO BEM
Vales C Juevoles, Occount Manager
(Authorized Signature) (Representative Name, Title)
Charles Lucostic / Account Manager
(Printed Name and Title of Authorized Representative)
•
June 19, 2019
(Date)
814-353-2121 / 814-353-1349
(Phone Number) (Fax Number)

Revised 06/05/2019

## ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFQ DEP19\*31

**Instructions:** Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

(Chec	k th	e b	ox next to each addendum	receive	d)	
	[X	]	Addendum No. I	[	]	Addendum No. 6
	[	]	Addendum No. 2	[	]	Addendum No. 7
	[	]	Addendum No. 3	[	7	Addendum No. 8
	[	J	Addendum No. 4	[	]	Addendum No. 9
	[	]	Addendum No. 5	ſ	1	Addendum No. 10

Addendum Numbers Received:

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Graymont (PA) Inc.
Company
Coules Courselie
Authorized Signature
June 19,2019
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

## SOLICITATION NUMBER: CRFQ DEP1900000031 Addendum Number: No.01

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable A	Addendum	Category:
--------------	----------	-----------

1,		Modify bid opening date and time
[	I	Modify specifications of product or service being sought
[	1	Attachment of vendor questions and responses
[	J	Attachment of pre-bid sign-in sheet
[	1	Correction of error
I	ı	Other

#### Description of Modification to Solicitation:

Addendum issued to publish and distribute the attached documentation to the vendor community.

1. The purpose of this addendum is to modify the bid opening date as follows:

Bid opening WAS: 6/21/2019 at 1:30 PM EDT Bid opening IS NOW: 6/26/2019 at 1:30 PM EDT

No other changes.

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

#### Terms and Conditions:

- 1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
- 2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012

## ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFQ DEP19\*31

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

**Acknowledgment:** I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:			
(Check the box next to each addendum re	eceive	d)	
[ ] Addendum No. I	]	]	Addendum No. 6
[X] Addendum No. 2	[	]	Addendum No. 7
[ ] Addendum No. 3	[	]	Addendum No. 8
[ ] Addendum No. 4	Į.	]	Addendum No. 9
[ ] Addendum No. 5	[	]	Addendum No. 10
further understand that any verbal represe discussion held between Vendor's represe	ntatior ntativ	n ma es a	denda may be cause for rejection of this bid. I ade or assumed to be made during any oral and any state personnel is not binding. Only the fications by an official addendum is binding.
	G	ra	ymont (PA) Inc.
		C	Company  Lucies C Lucyles  Authorized Signature
	J	un	e 19, 2019

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing. Revised 6/8/2012

Date

#### OSR North Bulk Enhanced Lime CRFQ DEP1900000031 Vendor Questions and Agency Answers Addendum #2

Q1.) If you could please help us get the Zip codes for the deliveries of the following counties:

Enhanced Lime - Marion County, Monongalia County, Preston County, Clay County

A1.) See attached spreadsheet for the zip code for each site. Note per Item 6.4 of the contract:

"Over the terms of the Contract WVDEP may acquire additional sites within the Monongalia, Preston, Grant, Tucker, Mineral, Upshur, Barbour and Marion, Clay Counties in West Virginia."

The sites in the spreadsheet represent all data currently available.

- Q2.) Could you please provide a list of the actual AMD plant locations (nearest town) and truckload size for each?
- A2.) See attached spreadsheet for the nearest town and truck sizes. Note per Item 6.4 of the contract:

"Over the terms of the Contract WVDEP may acquire additional sites within the Monongalia, Preston, Grant, Tucker, Mineral, Upshur, Barbour and Marion, Clay Counties in West Virginia."

The sites in the spreadsheet represent all data currently available.

- Q3.) We assume the small truck load sites cannot be accessed with a tractor trailer due to road conditions. Is this correct?
  - A3.) To clarify, roads are maintained on the sites to facilitate vehicular traffic. There are some sites that turning and maneuverability for large 18-wheeled trucks is very limited. Other sites have limited capacity so that large truck deliveries are not practical. In rare occasions, there are weight limitations to the county roads that access that location therefore large 18-wheel trucks cannot access the site.

#### Addendum #2

Project Site Name (C Projects)	Current	County	Nearest Town	Zip Code	Permit Number	GPS Latitud	GPS e Longitude	Current Product Type*	Silo Size (Tons)	Truck Size	Projected Tons Per Year**
Barbour County WV Sites  KEISTER COAL (Site 1 & 2)		Barbour	Belington	25405	184-77	39.0431	-80 0286	Pellelized Lime	10	Small	20
			Demigran	20403	104-17	33.0431	-50 0260	FERRIZEO LIMB		Sinas	20
Grant County WV Sites BUFFALO COAL		Gran!		20700	0.50.00	20.4400	22 22 2				
BUFFALO COAL (upper&lower)		Grant	Davis Davis	26739 26739	S-52-80 S-2003-88	39 1433 39 2078		Pelletized Lime Hydrated Lime	40 50	Small Large	20 320
	***************************************							177010364 6110			
Marion County WV Sites LAROSA FUELS		Marina	1	70004	5 4054 66	20.5440					
DAROSAFOELS		Marion	Jordan	26554	S-1051-86	39 5419	-80 0736	Enhanced Lime	50	Large	600
Mineral County WV Sites											
CHESTNUT RIDGE COAL		Mineral	Elk Garden	26717	S-28-83	39.3758	-79.1778	Hydraled Lime	30	Large	30
Monongatia County WV Sites											
ED-E DEVELOPMENT (Site 1 & Si	•	Monongalia	Morgantown	26508	\$-10-81	39.4872	-79 9011	Hydrated Lime	100	Large	100
ED-E DEVELOPMENT		Monongalia	Morgantown	26508	S-1032-86	39,4755	-79,7489	Hydrafed Lime	20	Small	20
EDWARD E. THOMPSON OMEGA MINING		Monongafia	Morgantown	26508	S-1041-89	39.7034	-79.8646	Enhanced Lime	20	Large	50
S. KELLY INDUSTRIES		Monongalia Monongalia	Morgantown Morgantown	26508 26508	D-79-82 51-78	39.5333 39.5139	-79.9353 -79.9472	Enhanced Lime	100 20	Ferde	200 20
STEWARTOWN COAL		Monongalia	Morgantown	26508	67-78	39.7194	-79.8986	Hydrated Lime Pelletized Lime	20	Small Small	50
VALLEY MINING		Monongalia	Brookhaven	26508	S-17-82	39.5869	79.8958	Pelletized Lime	20	Small	20
VALLEY MINING		Monongalia	Morgantown	26508	S-64-83	39.6478	-79.8472	Hydraled Lime	25	Smail	20
VMS		Monongalia	Morgantown	26508	S-1045-B7	39 4821	-79.9132	Pelletized Lime	20	Small	15
Z & F DEVELOPMENT		Monongalia	Morgantown	26508	S-21-84	39.555	-80.0281	Pelletized Lime	25	Small	20
Preston County WV Sites											
AMANDA NICOLE FUELS		Preston	Tunnellon	26444	S-1018 88	39.3694	79 7708	Hydrated Lime	40	Şmall	170
BOLINGREEN MINING		Preston	Albright	26537	S-1024-88	39 5276	-79 6582	Pelletized Lime	5	Small	2
BORGMAN COAL		Preston	Kingwood	26444	EM-32	39,4464	-79.7331	Hydrated Lime		Small	25
BUFFALO COAL DAUGHERTY COAL (Site 1 & 2)		Preston	Kempton	26716	S-122-80	39.2169	-79.4869	Policized Lime	30	Large	20
DAUGHERTY COAL (SRE 1 & 2)		Preston Preston	Masontown Masontown	26542 26542	S-1009-86 192-77	39.5444 39.553	-79.7305 -79.7397	Pelicized Lime Pelicized Lime	50 25	Small Small	30 170
DAUGHERTY COAL		Preston	Masontown	25542	65.77	39 5706	-79.7466	Pelletized Lime	50	Large	75
DECONDOR COAL		Preston	Reedsville	26537	U-147-82	39,4919	-79,7683	Hydrated Lime	20	Lorge	75
F & M Coal		Preston	Fellowsville	26452	S-1044-87	39.3011	-79.7711	Hydrated Lime	50	Large	250
FREEPORT MINING		Preston	Hapewell	26525	S-1005-95	39.6429	-79.7369	Pelletized Lane	50	Large	150
GLADE RUN IN-STREAM DOSER		Preston	Valley Point	26525	GR-DOS-17	39 5711	-79.648	Enhanced Limo	30	Large	750
HALLELUJAH MINING		Presion	Kingwood	26537	40-81	39.4969	-79.7187	Pelletized Linne	20	Small	10
HIDDEN VALLEY COAL		Presion	Hazellon	26525	S-60-84	39 6431	-79 5286	Polletized Lime	5	Small	2
INTER-STATE LUMBER INTER-STATE LUMBER		Preston	Tunnelton	26410	S-52-83	39 3975	79.7948	Pelletized Lime	25	Small	2
J E 8		Preston Preston	Albright Kingwood	26525 26537	176-77 S-61-82	39 5236 39 4611	-79.5958 -79.7 <b>2</b> 5	Pelletized Lime Pelletized Lime	5 10	Small Small	6
J, E. B.		Preston	Kingwood	26537	S-1063-86	39 4756	-79 7042	Pellelized Lime	S	Small	2
LEFT FORK LITTLE SANDY IN-STE	REAM	Preston	Tunnelton	26444	LF-DOS-18	39.3659	-79 7645	Enhanced Lime	30	Large	1000
MAPLE RUN IN-STREAM DOSER		Preston	Evansville	24660	MR-DOS-18	39.3671	-79.8861	Enhanced Lime	30	Large	550
MARTIN CREEK IN-STREAM DOS	ER	Preston	Albright	26519	MC DOS 18		79.651962	Enhanced Lime	30	Small	20
MARY RUTH		Preston	Valley Point	26525	S-1015-88	39.5806	-79.5889	Pellelized Lime	20	Small	5
PRESTON ENERGY		Preston	Howesville	25444	O-43-85	39.4253	-79.7642	Pelletized Lime	5	Small	6
PRESTON ENERGY		Preston	Howesville	26444	O-1035-87	39.4278	-79 7681	Hydrated Lime	50	Large	60
ROCKVILLE MINING (Sile 1 & 2) ROCKVILLE MINING (Sile 4 & 5)		Preston	MI Nebo Mi Nebo	26525	237-76 S-1035-86	39 5833	-79.6931	Pelletized Lime	5	Small	2
TATFUELS		Preston Preston	Albright	26525 26519	U 125 83	39,5848 39,5501	79.6971 79.6565	Pelletized Lime Pelletized Lime	1	Small Small	2
T & T FUELS		Preston	Albaght	26519	EM-113	39.5433	79.6323	Enhanced Lime	100	Large	1200
WOCAP ENERGY RESOURCES	······	Preston	Kingwood	26444	S-26-85	39.4503	-79.7331	Hydraled Lime	50	Small	30
Upshur County WV Sites											
DELTA MINING		Upshur	Buckhannon	26201	U-2024-87	38,9492	-80 1039	Pelletized Lime	25	Small	20
DLM COAL (also 23-76)	,	Upshur	Alexander	2623?	58-77	38.8183	-80 2003	Enhanced Lime	100	Large	600
Clau County MAI Sites											
Glay County WV Sites Greendale Coals Inc.		Clay	Lizemores	25125	S-75-83	38.2986	-81.1583	Enhanced Lime	100	Large	200
		······································						LITALISE & LATTE			J
*Product used at the site subject to	n							***************************************			
change.	ži.						Estimated Large	Truck Delivered P	er Year (>2	(2noT 0	6230
	** Yearly usage is estimated based on best data available. Subject to										
several factors including precipita											
site treatment efficiency.											
							Estimated Smal	l Truck Delivered P	er Year (<2	0 Tons	664

Estimated Small Truck Delivered Per Year (<20 Tons) Estimated Total Tons Per Year

## STATE OF WEST VIRGINIA Purchasing Division

### **PURCHASING AFFIDAVIT**

CONSTRUCTION CONTRACTS: Under W. Va. Code § 5-22-1(i), the contracting public entity shall not award a construction contract to any bidder that is known to be in default on any monetary obligation owed to the state or a political subdivision of the state, including, but not limited to, obligations related to payroll taxes, property taxes, sales and use taxes, fire service fees, or other fines or fees.

ALL CONTRACTS: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vender has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the malter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that: (1) for construction contracts, the vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

#### WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Graymont (PA) Chc	
Authorized Signature:	Date: (0-24-19
State of PA Charles Lucostic	
County of Centre, to-wit:	
Taken, subscribed, and sworn to before me this $2 $ day o	f_f
My Commission expires	20
AFFIX SEAL HERE N	OTARY PUBLIC Due E Cathernas

Purchasing Affidavit (Revised 01/19/2018)

Commonwealth of Pennsylvania - Notary Seal Sue E. Catherman, Notary Public Centre County My commission expires November 2, 2022 Commission number 1024853

Member, Pennsylvania Association of Notaries



Lime and Limestone products

Eastern Region Office, 25 rue de Lauzon, Suite 206, Boucherville, QC, J4B 1E7, Canada 1 450 449-2262

#### HIGH CALCIUM ENHANCED HYDRATED LIME

Nominal size: 20 µm - 0

Pleasant Gap, Pennsylvania

#### PRODUCT DESCRIPTION

A fine white powder with enhanced properties made by reacting quicklime with sufficient water to convert the Calcium Oxide (CaO) to Calcium Hydroxide (Ca(OH)<sub>2</sub>).

TYPICAL CHEMICAL PROPERTIE (ASTM C25, C1271, C1301)	S
Total Calcium expressed as Ca(OH) <sub>2</sub> (%)	95.5
Avail. Calcium Hydroxide (Ca(OH) <sub>2</sub> ) (%)	91.7
Magnesium Oxide (MgO) (%)	0.9
Silica (SiO <sub>2</sub> ) (%)	1.1
Ferric Oxide (Fe <sub>2</sub> O <sub>3</sub> ) (%)	0.2
Alumina (Al <sub>2</sub> O <sub>3</sub> ) (%)	0.4
Manganese Oxide (MnO) (ppm)	< 50
Total Sulfur (S) (%)	0.04
Loss on ignition (%)	25.0
Calcium Carbonate (CaCO <sub>3</sub> ) (%)	6.5
Moisture (H <sub>2</sub> O) (%)	0.9

TYPICAL PHYSICAL PROPERT (ASTM C110, GRAYMONT)	IES
Bulk Density	
▲ Loose / Packed, (kg/m³)	300 / 490
▲ Loose / Packed, (lb/ft³)	18.7/30.6
Angle of Internal Friction, Φ (°)	53.1
BET Surface Area (m²/g)	43.7
Pore Size (Å)	119
Pore Volume (cm³/g)	0.128
Volume Mean Diameter, D[4,3] (µm)	7.8
Diameter at 50%, Median, D√50 (µm)	6.4
Diameter at 90%, D <sub>√</sub> 90 (µm)	15.5

CLASSICAL REFERENCE DATA (CRC Handbook of Chemistry and Physics	, Boynton)
Specific Gravity	2.3 - 2.4
Solubility in Water (20 °C) (g/l)	1.65
pH (saturated solution) (25 °C)	12.454
Decomposition Temperature (°C)	580
Hardness (Mohs)	2 - 3
Specific Heat (0 °C) (cal/g*°C)	0.27
Heat of Solution (18 °C) (cal/mole)	2800

(Mode: Wet Dispersion, Format: Volume)				
Diameter (µm)	% Passing			
45	100			
38	99.9			
32	99.6			
25	98.3			
20	95.5			
10	73.3			

I ASED DARTICI E SIZE DISTRIBILITION

#### NOTICE

The test data herein is based on average results on production samples. Product shipments are subject to normal variation. Accordingly, test data cannot be taken as establishing maximum or minimum specifications. Product Code: 2095 (Bulk).



## SAFETY DATA SHEET

#### HIGH CALCIUM HYDRATED LIME

### Section 1. Identification

GHS product identifier

: HIGH CALCIUM HYDRATED LIME

Code

: Not available.

Other means of identification

: Hydrated Lime, Calcitic Hydrated Lime, Lime, Slaked lime, Lime Putty, Lime Slurry, Milk

of Lime, Calcium Hydroxide.

Product type

: Solid.

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses

: Neutralization, flocculation, stabilization, absorption.

Supplier/Manufacturer

: GRAYMONT

#200-10991 Shellbridge Way Richmond, BC V6X 3C6

Canada

Phone: 1 604 207-4292 Toll free: 1 866 207-4292 Fax: 1 604 207-9014

Web Site: http://www.graymont.com/

Emergency telephone number (with hours of operation)

: CHEMTREC, US (800-424-9300) INTERNATIONAL: (703-527-3887)

### Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture

: SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

CARCINOGENICITY (inhalation) - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) -

Category 1

**GHS label elements** 

Hazard pictograms







Signal word : Danger

**Hazard statements** : H318 - Causes serious eye damage.

H315 - Causes skin irritation.

H350 - May cause cancer if inhaled. H335 - May cause respiratory irritation.

H372 - Causes damage to organs through prolonged or repeated exposure. (respiratory

tract)

#### **Precautionary statements**





### Section 2. Hazards identification

Prevention : P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.

P271 - Use only outdoors or in a well-ventilated area.

P260 - Do not breathe dust.

P270 - Do not eat, drink or smoke when using this product.

P264 - Wash hands thoroughly after handling.

Response : P314 - Get medical attention if you feel unwell.

P308 + P313 - IF exposed or concerned: Get medical attention.

P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel

unwell.

P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take

off contaminated clothing. Wash contaminated clothing before reuse.

P332 + P313 - If skin irritation occurs: Get medical attention.

P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or physician.

Storage : P401 - Store to minimize dust generation.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazards not otherwise

classified

: None known.

## Section 3. Composition/information on ingredients

Substance/mixture

Other means of identification : Mixture

: Hydrated Lime, Calcitic Hydrated Lime, Lime, Slaked lime, Lime Putty, Lime Slurry, Milk of Lime, Calcium Hydroxide.

Ingredient name	%	CAS number
Calcium Hydroxide	87 - 99	1305-62-0
Crystalline silica, respirable powder	0.0001 - 1	14808-60-7

Crystalline silica has been found in some products at or above detection level 0.1%. Concentration is dependent upon limestone source.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

#### Description of necessary first aid measures

Eye contact

: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Get medical attention immediately. Call a poison center or physician.





### Section 4. First aid measures

#### Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Skin contact

: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

#### Ingestion

Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

#### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye damage. Inhalation : May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

burning sensation

Skin contact : Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

**Ingestion** : Adverse symptoms may include the following:

burning sensation

abdominal cramps and pain

vomiting

#### Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments : No specific treatment.





### Section 4. First aid measures

#### Protection of first-aiders

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

#### Extinguishing media

Suitable extinguishing media

: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: None known.

Specific hazards arising from the chemical

: No specific fire or explosion hazard.

Hazardous thermal decomposition products

: None.

Special protective actions for fire-fighters

: No special measures are required.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

#### Methods and materials for containment and cleaning up

Spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.





## Section 7. Handling and storage

#### Precautions for safe handling

#### Protective measures

: Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous.

## Advice on general occupational hygiene

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

# Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store to minimize dust generation. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

## Section 8. Exposure controls/personal protection

#### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
Calcium Hydroxide  Crystalline silica, respirable powder	ACGIH TLV (United States, 3/2017).  TWA: 5 mg/m³ 8 hours.  NIOSH REL (United States, 10/2016).  TWA: 5 mg/m³ 10 hours.  OSHA PEL (United States, 6/2016).  TWA: 5 mg/m³ 8 hours. Form: Respirable fraction  TWA: 15 mg/m³ 8 hours. Form: Total dust  MSHA PEL  TWA 8/40 hours: 5 mg/m³  OSHA PEL Z3 (United States, 6/2016).  TWA: 250 mppcf 8 hours. Form: Respirable  TWA: 10 mg/m³ 8 hours. Form: Respirable  TWA: 5 mg/m³ Form: Respirable fraction  TWA: 15 mg/m³ Form: Total dust  NIOSH REL (United States, 10/2013).  TWA: 0.05 mg/m³ 10 hours. Form: Respirable dust  TWA: 5 mg/m³ Form: Total dust  OSHA PEL (United States, 6/2016).  TWA: 50 µg/m³ 8 hours. Form: Respirable fraction  TWA: 50 µg/m³ 8 hours. Form: Respirable fraction  TWA: 50 µg/m³ 8 hours. Form: Respirable fraction  MSHA PEL  TWA 8/40 hours: 30 mg/m3/(%SiO2)+2 mg/m³ Form: Total dust  10 mg/m3/(%SiO2)+2 mg/m³ Form: Respirable dust

#### Canada

Occupational exposure limits





## Section 8. Exposure controls/personal protection

Ingredient name	Exposure limits
Calcium Hydroxide  Crystalline silica, respirable powder	CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 5 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 6/2017). TWA: 5 mg/m³ 8 hours. CA Ontario Provincial (Canada, 1/2018). TWA: 5 mg/m³ 8 hours. CA Quebec Provincial (Canada, 1/2014). TWAEV: 5 mg/m³ 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 10 mg/m³ 15 minutes. TWA: 5 mg/m³ 8 hours. CA British Columbia Provincial (Canada, 6/2017). TWA: 0.025 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 1/2014). TWAEV: 0.1 mg/m³ 8 hours. Form: Respirable dust CA Ontario Provincial (Canada, 1/2018). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction CA Saskatchewan Provincial (Canada, 7/2013). TWA: 0.05 mg/m³ 8 hours. Form: Respirable fraction CA Alberta Provincial (Canada, 4/2009). 8 hrs OEL: 0.025 mg/m³ 8 hours. Form: Respirable particulate.

## Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. Engineering controls may be required to control the primary or secondary risks associated with this product.

## Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

#### Individual protection measures

#### Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

#### Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

### Skin protection

#### Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

#### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.





## Section 8. Exposure controls/personal protection

Respiratory protection

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Wear an appropriate NIOSH approved respirator if concentration levels exceed the safe exposure limits.

## Section 9. Physical and chemical properties

**Appearance** 

Physical state : Solid. [Fine powder.]

Color : White.

Odor : Sweet, soil like odor.

Odor threshold : Not available.

Hq : 12.45 [ Sat. soln.] at 25°C

**Melting point** : Not available. **Boiling point** Not available. : Not applicable. Flash point **Evaporation rate** : Not available. Flammability (solid, gas) : Not available. Lower and upper explosive : Not available.

(flammable) limits

: Not available. Vapor pressure Vapor density : Not available. Relative density : 2.3 to 2.4

Solubility in water : 0.165 g/100 g at 20°C

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature : Not available. : 540°C (1004°F) Decomposition temperature : Not available. Viscosity Flow time (ISO 2431) : Not available.

## Section 10. Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. Reactivity

**Chemical stability** : The product is stable.

Possibility of hazardous

reactions

: None.

: Do not allow hydrated lime to come into contact with incompatible materials. e.g. acids, Conditions to avoid

> reactive fluoridated compounds, reactive brominated compounds. reactive powdered metals, organic acid anhydrides, nitro-organic compounds, reactive phosphorous

compounds, interhalogenated compounds.

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials and acids.



## Section 10. Stability and reactivity

Hazardous decomposition : None.

products

## Section 11. Toxicological information

#### Information on toxicological effects

#### **Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
Calcium Hydroxide	LD50 Oral	Rat	7340 mg/kg	-:

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Calcium Hydroxide	Eyes - Severe irritant	Rabbit	-	10 mg	-

#### **Sensitization**

There is no data available.

#### Mutagenicity

There is no data available.

#### Carcinogenicity

#### Classification

Product/ingredient name	OSHA	IARC	NTP
Crystalline silica, respirable powder	-	1	Known to be a human carcinogen.

#### Reproductive toxicity

There is no data available.

#### **Teratogenicity**

There is no data available.

#### Specific target organ toxicity (single exposure)

Name	Category	Target organs
Calcium Hydroxide	Category 3	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Name	Category	Target organs
Crystalline silica, respirable powder	Category 1	respiratory tract

#### **Aspiration hazard**

There is no data available.

Information on the likely routes of exposure

: Dermal contact. Eye contact. Inhalation. Ingestion.

#### Potential acute health effects

**Eye contact** : Causes serious eye damage. **Inhalation** : May cause respiratory irritation.

Skin contact : Causes skin irritation.

Ingestion : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics





## Section 11. Toxicological information

**Eye contact** : Adverse symptoms may include the following:

pain watering redness

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

burning sensation

**Skin contact**: Adverse symptoms may include the following:

pain or irritation

redness

blistering may occur

**Ingestion** : Adverse symptoms may include the following:

burning sensation

abdominal cramps and pain

vomiting

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

#### Short term exposure

Potential immediate

: No known significant effects or critical hazards.

effects

Potential delayed effects

: No known significant effects or critical hazards.

Long term exposure

Potential immediate

effects

: No known significant effects or critical hazards.

Potential delayed effects : No known significant effects or critical hazards.

#### Potential chronic health effects

General : Causes damage to organs through prolonged or repeated exposure.

**Carcinogenicity** : May cause cancer if inhaled. Risk of cancer depends on duration and level of exposure.

Mutagenicity: No known significant effects or critical hazards.

Teratogenicity: No known significant effects or critical hazards.

Developmental effects: No known significant effects or critical hazards.

Fertility effects: No known significant effects or critical hazards.

#### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
Calcium Hydroxide	Acute LC50 33884.4 µg/L Fresh water	Fish - Clarias gariepinus - Fingerling	96 hours

#### Persistence and degradability

There is no data available.





## Section 12. Ecological information

#### Bioaccumulative potential

There is no data available.

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

## Section 13. Disposal considerations

#### Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	-	-	-	-
Transport hazard class(es)	-	-	-	-
Packing group	-	-	-	-
Environmental hazards	No.	No.	No.	No.

AERG: Not applicable.

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.





## Section 15. Regulatory information

#### U.S. Federal regulations

: United States inventory (TSCA 8b): All components are listed or exempted.

RCRA classification: Calcium Hydroxide is not listed or classified.

CWA-311: Calcium Hydroxide has been withdrawn from the Clean Water Act (CWA) list

of hazardous subtances. (11/13/79) (44FR65400).

CERCLA: Calcium Hyrdoxide is not listed.

FDA: Calcium Hydroxide has been determined as Generally Recognized As Safe (GRAS)

by FDA. See 21CFR184.1205. (CFR Title 21 Part 184 - - Direct food substances

affirmed as generally recognized as safe).

Clean Air Act Section 112

(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

**DEA List I Chemicals** 

(Precursor Chemicals)

: Not listed

DEA List II Chemicals

: Not listed

(Essential Chemicals)

## SARA 302/304 Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

**SARA 311/312** 

Classification

: SKIN CORROSION/IRRITATION - Category 2

SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

CARCINOGENICITY (inhalation) - Category 1A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) -

Category 1

#### Composition/information on ingredients

Name	Classification
Crystalline silica, respirable powder	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 CARCINOGENICITY - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) (inhalation) - Category 1

#### **SARA 313**

There is no data available.

#### State regulations

Massachusetts : The following components are listed: Calcium Hydroxide; Crystalline silica, quartz

New York : None of the components are listed.

New Jersey : The following components are listed: Calcium Hydroxide; Crystalline silica, quartz : The following components are listed: Calcium Hydroxide; Crystalline silica, quartz

California Prop. 65





## Section 15. Regulatory information



**WARNING**: This product can expose you to Crystalline silica, respirable powder, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

#### Canadian lists

Canada inventory (DSL

NDSL)

: All components are listed or exempted.

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

### Section 16. Other information

#### Hazardous Material Information System (U.S.A.)

Health: 3 \* Flammability: 0 Physical hazards:

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

#### National Fire Protection Association (U.S.A.)

Health: 3 Flammability: 0 Instability:

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

#### Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Expert judgment
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1	On basis of test data
CARCINOGENICITY (inhalation) - Category 1A	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (respiratory tract) -	Calculation method
Category 1	

#### **History**

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Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as

modified by the Protocol of 1978. ("Marpol" = marine pollution)





## Section 16. Other information

UN = United Nations

#### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with

caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

