

Historic Preservation Services Community Development & Neighborhood Services 281 N. College Ave. Fort Collins, CO 80524

970.224.6078 preservation@fcgov.com fcgov.com/historicpreservation

## CERTIFICATE OF APPROPRIATENESS ISSUED: October 22, 2024 EXPIRATION: October 22, 2025

ATTN: Jeremy Clift, project manager, Brinkman Construction ico: Mountain 314 LLC 262 E Mountain Ave Fort Collins, CO 80524-2835

Dear Property Owner:

This letter provides you with confirmation that the proposed changes to your designated Fort Collins landmark property, the Armory at 314 E. Mountain Ave have been approved by the City's Historic Preservation Division because the proposed work meets the criteria and standards in Chapter 14, <u>Article IV</u> of the Fort Collins Municipal Code.

- 1) Cleaning of the exterior masonry
  - Condition 1: Prior to application on the full building, a test patch of no more than 4'x4' on the west side (to be enclosed with new construction) will be completed to confirm no inadvertent damage to the masonry from the detergent.
- 2) Repoint of mortar joints with O-type mortar.

Notice of the approved application has been provided to building and zoning staff to facilitate the processing of any permits that are needed for the work. Please consider National Park Service Preservation Brief #1, <u>Assessing Cleaning and Water-Repellant Treatments for Historic Masonry</u> <u>Buildings</u> as you complete this project.

Please note that work beyond that indicated in your permit application/correspondence requires additional approval. Items requiring further approval include, but are not limited to, the following activities:

- Highly abrasive paint removal methods such as use of rotary sanders, power washing, or sandblasting that are discouraged due to likelihood of damage to the underlying material;
- Painting of unpainted masonry.

If the approved work is not completed prior to the expiration date noted above, you may apply for an extension by contacting staff at least 30 days prior to expiration. Extensions may be granted for up to 12 additional months, based on a satisfactory staff review of the extension request.

If you have any questions regarding this approval, or if we may be of any assistance, please do not hesitate to contact us. We can be reached at <u>preservation@fcgov.com</u> or at (970) 224-6078.

Sincerely,

Jim Bertolini Senior Historic Preservation Planner



## Design Review Application Historic Preservation Division

*Fill this form out for all applications regarding designated historic buildings within the city limits of the City of Fort Collins. Review is required for these properties under Chapter 14, <u>Article IV</u> of the Fort Collins Municipal Code.* 

## **Applicant Information**

Applicant's Name	Daytime Phone	Evening Phone
Mailing Address (for receiving application-related correspondence)		State Zip Code
Email		
Property Information (put N/A if owner is applicant)		
Owner's Name	Daytime Phone	Evening Phone
Mailing Address (for receiving application-related correspondence)		State Zip Code
Email		

## **Project Description**

Provide an overview of your project. Summarize work elements, schedule of completion, and other information as necessary to explain your project.

The following	attachments	are REQUIRED:
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Complete Application for Design Review

- □ Detailed Scope of Work (and project plans, if available)
- Color photos of existing conditions

Reminders: Complete application would need all of checklist items as well as both pages of this document.

Detailed scope of work should include measurements of existing and proposed.

*Please note: if the proposal includes partial or full demolition of an existing building or structure, a separate demolition application may need to be approved.* 

Additional documentation may be required to adequately depict the project, such as plans, elevations, window study, or mortar analysis. If there is insufficient documentation on the property, the applicant may be required to submit an intensive-level survey form (at the applicant's expense).

## Detail of Proposed Rehabilitation Work (\*Required)

If your project includes multiple features (e.g. roof repair and foundation repair), you must describe each feature separately and provide photographs and other information on each feature.

Feature A Name:	
Describe property feature and its condition:	Describe proposed work on feature:
Feature B Name:	
Describe property feature and its condition:	Describe proposed work on feature:

Use Additional Worksheets as needed.

## **Required Additional information**

The following items must be submitted with this completed application. Digital submittals preferred for photographs, and for other items where possible.

At least one current photo for each side of the house. Photo files or prints shall be named/labeled with applicant name and elevation. For example, smitheast.jpg, smithwest.jpg, etc. If submitted as prints, photos shall be labeled

Photos for each feature as described in the section "Detail of Proposed Rehabilitation Work." Photo files or prints shall be named or labeled with applicant name and feature letter. For example, smitha1.jpg, smitha2.jpg, smithb.jpg, smithc.jpg, etc.

Depending on the nature of the project, one or more of the following items shall be submitted. Your contractor should provide these items to you for attachment to this application.

- Drawing with dimensions.
- Product specification sheet(s).
- Description of materials included in the proposed work.
- Color sample(s) or chip(s) of all proposed paint colors.

## □ Partial or full demolition is a part of this project.

Partial demolition could include scopes such as taking off existing rear porches to create space for a new addition or removing an existing wall or demolishing a roof. If you are taking away pieces of the existing residence, you are likely undergoing some partial demolition.

Signature of Owner

Date





DEL'S MASONRY, INC. PO BOX 1551 Longmont, CO 80501

September 27, 2023

Armory **RESTORATION** 300 East Mountain Ave. Fort Collins, CO 80524

## Scope of Work and Breakout:

## Sample Repair and Replace

 Includes pressed brick to match existing and Type O mortar. Repair will include SE corner where brick are loose and falling out of wall as well as one joist pocket infill above.



## Infills at openings (114 locations)

• Includes pressed brick and Type O mortar to match existing. Tooth out cut or damaged brick at each location and infill to match existing. Approximately 3 bricks per location.



## **REMOVE and Replace NORTH Protruding Wall**

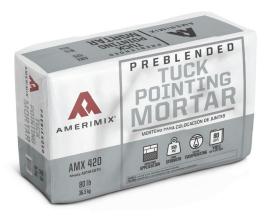
• Tooth and remove North protruding wall. Tooth to tie into existing with Pigeonhole corner to match existing. Includes pressed brick and Type O mortar to match existing.





## AMX 420 Tuck Pointing Mortar

Product # AMX 420



## **1. PRODUCT NAME:**

Amerimix AMX 420 Tuck Pointing Mortar

## **2. PRODUCT DESCRIPTION:**

Amerimix AMX 420 Tuck Pointing Mortar is a factory blend of cement, hydrated lime, and dried masonry sand with a formulation highly engineered to repair and restore masonry structures where a low strength mortar is required.

## **Features and Benefits:**

- Factory blended under controlled conditions to meet strict quality control standards for mix consistency and engineered performance tolerances
- High bond strength to masonry
- Extended mortar board life, less re-tempering required
- Increased yield compared to typical field mix mortars
- · May be pigmented

## **Uses:**

- Pointing mortar joints
- Restoration masonry construction
- Brick and block tuck pointing
- Above grade applications
- Interior or exterior applications
- Laying or resetting brick, block, and stone.

## **LEED Eligibility:**

Regional Materials (MR-c5)

Recycled Material (MR-c4)

NOTE: Amerimix products generally qualify for LEED Materials and Resources. Contact Technical Services for additional information regarding LEED qualifications for your specific product application and project location.

## Packaging:

Available in 80 lb. (36.3 kg) bags

## Approximate Coverage:

Bag Size / Water	Yield – For Laying Brick, Block or Cultured Stone
80 lb. (36.3 kg) 1.5 – 2 gal (5.7 – 7.6L)	Yield .78 ft <sup>3</sup> (0.02 m <sup>3</sup> )

NOTE: Yield and water are approximate. The yield above does not allow for waste and spillage.

## Safety:

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS sheets are available on our website Amerimix.com or you can contact CHEMTREC (24 hours availability) 800-424-9300 or contact Amerimix Technical Services at 800-334-0784.

## **3. TECHNICAL DATA:**

Meets or exceeds the following:

ASTM C270 Property Specification Requirements

Mortar	Average compressive strength @ 28 days		Air content maximum %
Туре О	350 psi (2.4 MPa)	75%	14%

## **Testing Notes:**

- Mortar is designed to meet the requirements of ASTM C270 Standard Specification for Mortar for unit Masonry. This is a laboratory test procedure.
- Mortar should be tested in the field by following ASTM C780, Standard Test Method for Preconstruction & Construction Evaluation of Mortar for Plain & Reinforced Unit Masonry.
- Due to the procedure differences between ASTM C270 & ASTM C780, the compressive strength values resulting from field sampled mortars are not required nor expected to meet the minimum compressive strengths of the property specification requirements of ASTM C270 as tested under controlled laboratory conditions nor do they represent the compressive strength of the mortar in the wall.

## **Applicable Standards:**

## Refer to:

ACI 530.1 Specification for Masonry Structures

- Recommended Practices and Guild Specifications for Cold Weather Masonry Construction
- Recommended Practices and Guide Specifications for Hot Weather Masonry Construction

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## **ASTM International (ASTM)**

- ASTM C595 Standard Specification for Blended Hydraulic Cements
- ASTM C150 Standard Specification for Portland Cement
- ASTM C207 Standard Specification for Hydrated Lime for Masonry Purposes
- ASTM C270 Standard Specification for Mortar for Unit Masonry
- ASTM C387 Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete
- ASTM C780 Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
- ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete
- ASTM C1157 Standard Performance Specification for Hydraulic Cements
- ASTM C1314 Standard Test Method for Compressive Strength of Masonry Prisms
- ASTM C1384 Standard Specification for Admixtures for Masonry
- ASTM C1586 Standard Guide for Quality Assurance of Mortar

## National Concrete Masonry Association (NCMA)

- NCMA TEK Bulletin #8-2A Removal of Stains from Concrete Masonry
- NCMA TEK Bulletin #8-3A Control and Removal of Efflorescence

## 4. PRE-CONSTRUCTION GUIDELINES Job Mock-Ups:

Amerimix requires that when Amerimix Tuck Pointing Mortar – AMX 420 is used in any application or as part of any system that includes other manufacturer's product, the contractor and/or design professional shall test all the system components collectively for compatibility, performance, and long-term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the test performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project-specific conditions being addressed, and standardized tests performed for each proposed system or variation. Approved mock ups or sample panels should be retained until completion of the project.

## 5. INSTALLATION

## **Preparation:**

- For best results all materials should be stored between 40°F (4°C) and 80°F (27°C) 24 hours prior to application. The type of mortar selected should be coordinated with the type of application, type of masonry units and intended use. Mortars with lesser compressive strength should be used with softer masonry units or tuck-pointing applications.
- 2. For existing surfaces proper preparation is critical. Remove all loose particles, dirt, dust, or any foreign materials that would inhibit proper bond to brick, block, stone, or masonry substrates.
- 3. Protect uncoated aluminum from direct contact with Portland cement-based materials.
- 4. Certain conditions may require the substrate to be SSD (saturated surface dry) conditioned such as dry windy climates, porous substrates, or high temperatures.

- 5. The optimal temperature range for mortar application is between 40°F and 90°F (4°C and 32°C). Application outside of this range is possible when appropriate precautions for cold or hot weather construction are implemented in compliance with ACI, PCA, ASTM or Masonry Institute standards.
- 6. Shelf life of Amerimix materials is one year from date of manufacture. Do not use materials after this date.

NOTE: it is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

## Mixing:

- 1. Use of a mechanical mixer will help ensure a more uniform mix.
- Use approximately 1.5-gal (5.7 L) of clean potable water per 80 lb. (36.3 kg) bag. Pour approximately ¾ of the required water amount into the mixer. NOTE: Do not add materials other than clean, potable water.
- 3. Water with high mineral salt content can cause efflorescence. Efflorescence occurs naturally and is beyond the control of Amerimix.
- 4. With the mixer running, add bags of dry mortar and mix thoroughly.
- 5. Add remaining water in small amounts as necessary to achieve optimum consistency and workability. Mix for a minimum of 5 minutes.
- 6. Let mix stand for 2 minutes to enable the absorption of water and re-mix.
- 7. Mortar should always be mixed to a firm, moist consistency. A mix that is too dry and crumbly will not provide the proper bond. Mortar that is too wet will be weak and will not provide adequate bond to the substrate and can result in reduced strength, efflorescence, cracking, dusting, or scaling. AVOID A SOUPY MIX.
- 8. Agitate material as necessary within it working time to maintain workability. Do not add any additional water.

## Laying Brick/Block:

- AMX 420 should be installed in accordance with the provisions of applicable ASTM standards, product published specifications and local building code requirements. Always follow traditional industry best practices appropriate for the application and weather conditions.
- 2. When laying brick or block, a sound footing must be in place following project architectural/engineered specifications and or consulting with your local building code for required footing size and depth.
- 3. Apply a full bed of mortar onto the base/footing where the brick or block will be placed.
- 4. Butter the end of the brick or block with mortar before placing into the full bed of mortar. Tap into place while leveling. Continue establishing a brick pattern.
- 5. Agitate material as necessary within it working time to maintain workability. Do not add any additional water.
- 6. Tool joints once the mortar has set up enough and is thumb print hard. For consistency of finish and color, joints should be struck with consistent timing, avoiding early or late tooling.
- 7. For cleaning cure mortar for a minimum of 7 and no more than 28 days.

NOTE: Good workmanship in conjunction with proper design and detailing assures durable, efficient, watertight construction.

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## **Tuck Pointing:**

- 1. Remove any existing soft, loose, unsound mortar from the mortar joints. Surface must be clean and free of any dirt, paint, sealers, or any foreign materials that would inhibit bond
- 2. Brings the area to a Surface Saturated Dry (SSD) condition by misting the area with a hose or spray bottle.
- 3. Place mortar into the joint with a tuck-pointing trowel.
- 4. Use the tuck-pointing trowel to tool the joint and compact for a tight, neat appearance.

*RE–TEMPERING NOTE: The re–tempering of mortar will alter color and appearance of the mortar joint and may also reduce bond and compressive strength.* 

## **Curing:**

Loss of surface water may occur quickly due to higher ambient air temperatures and windy conditions. Fog spray as needed. Protect from rain and freezing for 24 hours.

## **Cleaning:**

- Use water to clean all tools immediately after use.
- Dried material must be mechanically removed.
- Only clean potable water should be used in the cleaning process.

## Safety:

READ and UNDERSTAND the Material Safety Data Sheet (MSDS) before using this product. WARNING: Wear protective clothing and equipment. For emergency information, call CHEMTREC at 800-424-9300. KEEP OUT OF REACH OF CHILDREN.

## **6. AVAILABILITY**

Amerimix products are available throughout the US and Canada. For more information, contact Amerimix at: Toll-Free: 866-725-7383 Website: Amerimix.com

## 7. TECHNICAL SUPPORT

For technical assistance please contact us at: Toll-Free: 866-725-7383

## 8. WARRANTY

## What Does This Warranty Cover?

The manufacturer warrants that this product shall be of merchantable quality when used or applied in accordance with the manufacturer's instructions. This product is not warranted as suitable for any purpose other than the general purpose for which it is intended. This warranty runs for one (1) year from the dates the product is purchased. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMTED TO THE DURATION OF THIS WARRANTY. Liability under this warranty is limited to replacement or defective products or, at the manufacturer's option, refund of the purchase price. CONSEQUENTIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY.

## **How Long Does Coverage Last?**

This warranty lasts for a period of one (1) year from the date of purchase. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

## What Will Amerimix Do to Address Problems?

Amerimix will replace the defective product or refund the purchase price, at its option.

## What Does This Warranty Not Cover?

Amerimix will not be liable for damage or loss resulting from a failure to store, use, install or maintain the product in strict accordance with Amerimix's specifications and instructions. In no event will Amerimix be liable for damages in excess of the purchase price for the product. CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

## How Do I Get Warranty Service?

Within thirty (30) days after discovering a defect in the product, contact Amerimix in writing at the following address: Amerimix Technical Support Group 625 Griffith Road - Suite 100 Charlotte, NC 28217 Include with your letter a brief description of the problem and any sales receipt, invoice or other proof of the date of purchase. To obtain

sales receipt, invoice or other proof of the date of purchase. Io obtain Amerimix's technical or sales literature, please call (888) 313-0755 or visit our website at Amerimix.com

## How Does State Law Relate to This Warranty?

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## DANGER:

This product contains Crystalline Silica and Portland Cement which are known to cause cancer, eye damage, lung disease, respiratory damage, silicosis, skin burns, and other serious medical conditions. Harmful if swallowed and corrosive.

## **CAUTION:**

Do not handle or use this product until you review and understand the instructions, including the safety precautions. The applicable safety precautions include wearing protective clothing, protective eyewear, protective footwear, protective gloves, and respiratory protection when handling or working around this product. Protective clothing should include face protection, impervious gloves, long pants, and a long-sleeved shirt. Eye and respiratory protection must comply with the guidelines of the Occupational Health and Safety Administration (OSHA). Do not breathe or otherwise ingest the dust from this product. Wash hands and clothing after handling or working around this product. This product should only be used outdoors or in a well-ventilated area

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and the user should avoid creating dust. Dispose of unused concrete products in accordance with applicable law. Review the Safety Data Sheet, which is available online at www.sakrete.com, prior to handling or using this product.

## **KEEP OUT OF REACH OF CHILDREN.**

#### FIRST AID:

Seek medical attention if you experience skin burns or irritation. If you injest this product, rinse your mouth with water and seek medical attention if you feel ill. In the event of eye irritation, remove any contact lenses and carefully rinse eyes with water for several minutes. If eye irritation persists, seek medical attention. If inhaled, relocate to an area with fresh air and seek medical attention if you feel ill.

#### WARNING:

This product can expose you to chemicals including Crystalline Silica, which is known to the State of California to cause cancer, and Lithium Carbonate, which is known in the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

#### **ENVIRONMENTAL ADVISORY:**

Uncured or crushed cured cement is an environmental hazard which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.

> Amerimix 400 Perimeter Center Terrace, Suite 1000 Atlanta, GA 30346 Ph: 866-725-7383 Amerimix.com

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REV: 06/24

# NMD 80

## PRODUCT SPECIFICATION NMD 80

## **New Masonry Detergent**

## **D**ESCRIPTION AND USE

NMD 80 is a buffered detergent-based solution designed for the cleaning of new masonry structures. NMD 80 can be used on many types of brick, block, unpolished stone, cast stone, and precast. No scrubbing is necessary.

## ADVANTAGES

- \* Spray-on/spray-off application Increases square foot production and reduces labor.
- \* Top-down rinsing dramatically reduces total water into the wall.
- \* Detergent means fewer applications
- \* No respirator needed when spraying outside
- \* Reduces water-in-wall problems, such as efflorescence
- \* Will not harm glass and anodized window frames when used as directed.

## LIMITATIONS

- \* Not to be used on polished stone
- \* Product is very mild but may be corrosive to certain woods, metals, and plants. Covering may be required.
- \* Avoid elevator doors as the coating will be affected by the chemical.
- \* Cover any building hardware, including brass, bronze, copper, gold, stainless steel or mild steel.
- \* Use low pressure rinsing on synthetic stone and surface dyed substrates. Do not brush-apply the product.

## TECHNICAL DATA

Appearance & Odor: Amber color, mild biting odor. Physical State: Liquid pH: 1.0 Vapor Pressure (mmHg): As water Vapor Density (air=1): As water Boiling Point: 210 deg F Freezing/Melting Point: N/A Specific Gravity (water =1): 1.15 Evaporation Rate: >1 As water Solubility in Water: Complete

## PREPARATION

Protect adjacent and surrounding building hardware surfaces not intended to be cleaned from exposure to the cleaning solution. Avoid direct contact with foliage. Cover landscaping using plastic or wet the foliage with water before and after the cleaning process.

## SURFACES & AIR TEMPERATURES

Excessively high or low temperatures will produce poor results and possible harm. Best cleaning results are obtained when air and surface temperatures are  $40^{\circ}$  F or above. Do not clean when temperatures are below freezing or will be overnight. If freezing conditions exist, allow adequate time for surface to thaw. If air temperatures exceed 90° F, flash cool the surface with water or employ a spray bar below the area to be cleaned before applying product. Do not allow product to dry.

> EACO CHEM. INC. 765 COMMERCE AVE NEW CASTLE PA 16101

## **PRE-CLEANING TEST PANEL**

Always test prior to beginning full-scale cleaning operations. Testing should confirm cleaning effectiveness on each type of surface and stain designated to be cleaned. Testing also determines the desired dwell time and any potential or adverse reactions with adjacent materials. Allow test panels to dry thoroughly before evaluating final appearance and results.

## PRE-CLEANING - WINDOWS, WINDOW FRAMES, DOOR FRAMES

Best way to test windows, window frames and door frames are to apply the suggested product to the eraser end of a pencil and put one dot on each of the surfaces in question. Let product dry on the surface (10 - 15 minutes). Then rinse completely and check results. You should see no effect on the surface. If this test produces any type of discoloration, do not allow the product to come in contact with these surfaces. They must be covered prior to cleaning.

## SUITABLE SUBSTRATES

All brick, block, tile, stone (real and synthetic), mortar, pre-cast, and concrete brick

## DILUTION

4:1 (4 parts water to 1 part solution) is the standard dilution on most surfaces.

## **COVERAGE RATES**

Coverage rates will vary from 100-200 sq. ft. per gallon depending on the surface porosity, texture and severity and type of staining.

## **PRE-** APPLICATION INFORMATION

Before applying, read "Protect" in the Preparation section and "Precautionary Measures" under Safety Information. Heavy clumps should be removed while chemical soaks on the wall. Use a steel garden edger, carbide block or brick to remove chunks. Scrape after detergent application. Hold the edger at a narrow angle to the wall and use a quick chop to remove the obstruction.

## PROTECTION

Building surfaces such as glass, anodized aluminum, brick, block, and even limestone are usually not affected by NMD80. Follow best job site practices and safety precautions. Chances of causing harm when using accepted standard practices is minimal. Elevator doors, stainless steel hardware and brass coated parts should be covered.

> EaCo Chem UPDATED 11/26/14 PAGE 1

PHONE: (724) 656-1055 FAX: (724) 656-0757 www.eacochem.com

# NMD 80

## PRODUCT SPECIFICATION NMD 80

## **New Masonry Detergent**

#### LOW PRESSURE APPLICATION

- 1. Lightly pre-wet or flash-cool the surface (do not soak).
- 2. Apply NMD 80 through an EC Jet or EC Spray to the entire section to be cleaned.
- 3. After the initial application of chemical, scrape the large chunks with a long handled scraper from the first 8 feet of the wall.
- 4. Check smears and tags to see if the crumble easily.
- 5. If needed, repeat application to melt remaining residue and extend dwell time. If there is no foaming, the residue is ready to be rinsed.
- 6. With NMD 80, the longer it stays on the wall, the cleaner the result and the least amount of rinsing is required. After re-application, scraping can be done further down the wall.
- 7. Begin rinsing from top down. Use long even strokes that overlap each other.

## Caution: Do not allow the product to dry on a surface.

## TILT-UP CONCRETE

Dilutions will vary according to surface finish. A downstream projection nozzle is appropriate for chemical application. Cleanup entails a uniform building face without surface changes, not removal of mortar smears. Pre-wet from top to bottom, followed with a quick, even application of NMD80. Do not allow product to dry on surface. Always rinse thoroughly.

## RINSING

Proper rinsing determines the quality of the job. Generalized rules of rinsing would include:

- 1. Use a wide tip no less than 25 degrees. A 40-degree tip is recommended especially for sand faced or other special brick surfaces to reduce the potential for surface damage. Observe distance from the wall to avoid potential damage to the mortar joints. Do not use zero degree nozzles. Keep nozzles well back from surface.
- 2. Craftsmanship determines the appropriate pressures for rinsing. A thorough rinse job is always recommended, however our chemistry never requires flooding a wall. Pressures that mark or damage the surface should be avoided. When in doubt, follow the manufacturer's recommended P.S.I. for the substrate you are working on.
- 3. Always use overlapping passes to achieve a uniform appearance.
- 4. Always rinse from top down to prevent drying and to combat operator fatigue.

Note: Sensitive surfaces, ie: sand faced brick, concrete brick, synthetic masonry and surface dyed substrates need to be rinsed at low pressures (Ex. Standard garden hose with nozzle).

## **P**RECAUTIONARY **M**EASURES

Always wear goggles and rubber gloves when handling this product. Keep off of skin and clothing. If material comes in contact with clothing, wash before re-use. Do not dilute NMD80 with any other product except water. Do not use for any other applications other than specified. Do not remove label. Avoid elevator doors as the coating can be affected. Read Material Safety Data Sheet for additional safety and health hazard information prior to use. Do not get in eyes, on skin or clothing. Avoid breathing fumes. Keep container closed when not in use. Use with adequate ventilation. NIOSH/MSHA approved respiration for use with acids if adequate ventilation is unavailable. Though the potential for fuming NMD80 is minimal, take precautions to avoid exposing building occupants to fumes. Dispose of empty containers according to federal, state, and local requirements. Avoid drifting of material or rinse water onto autos and pedestrians by protecting or diverting traffic.

## Spill or Leak Procedures

Check with the state, local, or federal regulations for waste disposal methods in the area. Wear proper protective equipment while doing cleanup. For large spills, dike and contain for intended use. For residual, use a chemical absorbent. For small spills, use a chemical absorbent product and place in approved container for disposal.

## CONTAINER HANDLING/STORAGE

Store the product in a cool, dry place away from alkali/base materials. Do not allow this product to freeze. Vent bung cap before opening. Keep container tightly closed when not in use. Wash thoroughly after handling. Empty containers retain residue and vapors and must be handled as if full. Completely rinse drum prior to disposal.

## INSTRUCTIONS IN CASE OF CONTACT OR EXPOSURE

- Eyes: Flood with water for fifteen minutes and seek medical attention. Remove contact lenses immediately.
- Skin: Wash off with soap and water. Use a good skin emollient. If irritation develops, seek medical attention.
- Ingestion: Drink lots of water to dilute. Do not induce vomiting. Seek immediate medical attention.
- Inhalation: Remove to fresh air. Call physician and seek medical attention if irritation develops.

#### Notice

This product has been classified in accordance with the hazard criteria of the CFR.

#### DISCLAIMER

The information herein is given in good faith, but no warranty, either expressed or implied is made. Final determination of the 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 be sure or guarantee these are the only hazards which exist.

#### **CUSTOMER SERVICE**

Factory personnel are available for assistance at 800-313-8505. They are available Monday through Friday, 8am to 5pm EST. Questions may also be sent via e-mail to info@eacochem.com. A reply can be expected the following business day.

Рноле: (724) 656-1055 Fax: (724) 656-0757 www.eacochem.com





## Peel Away<sup>®</sup> 1 Paint Remover Technical Data Sheet

## **Product Description:**

**Peel Away® 1 Paint Remover** is a premier, industry-leading, heavy-duty paint removal product formulated to remove up to 30 layers of paints and coatings in as little as a single application. It is engineered to remove oil, alkyd, and lead-based paints and most other older coatings from virtually all types of interior and exterior surfaces. Best of all, it penetrates to the bottom layer and performs even when the top layers are latex, acrylic, or epoxy, as long as the bottom layer is an oil, alkyd or lead-based coating. **Peel Away® 1** is NOT engineered to work if the only coatings are latex, acrylic, or epoxy.

**Peel Away® 1 Paint Remover** is a complete paint removal system with everything you need to get started under the lid. Every container includes **Peel Away® 1 Paint Remover**, Dumond Laminated Paper, Citri-Lize® Neutralizer & Mill Glaze Remover, and a pH test kit. 1 Gallon containers also include a plastic scraper.

## Main Features & Benefits:

- Heavy duty paint stripper designed to remove oil, alkyd, and lead-based coatings.
- Removes up to 30 layers, as long as the base layer is an oil, alkyd, or lead-based coating.
- Does NOT contain dangerous Methylene Chloride or harmful NMP.
- Ideal for wood, brick, stone, and steel. See full list under "Recommended Substrates".
- Suitable for interior and exterior applications.
- May darken some hardwood surfaces. See "Limitations" below.
- Performs best on older, pre-1980's coatings.
- Manufactured in the USA with high quality domestic and imported ingredients.

## **Technical Data:**

Form:	White Paste
Weight/Gal:	10 lbs.
pH:	12 pH
Freezing Point:	32°F / 0°C
Coverage:	Approx. 20 - 22 sq. ft. per gallon.
Shelf Life:	Approx. 3 years when stored in a tightly sealed container at room
	temperature, in a clean, dry environment.

## **Recommended Substrates:**

For use on wood, brick, stone, marble, terra cotta, granite, terrazzo, concrete, cement, stucco, plaster, cast iron, steel, tin, copper, tile, enamel, clapboard, and slate. Not recommended for use on some types of fiberglass, veneer, plywood, drywall, aluminum, brownstone, sandstone, limestone, laminated glass, plexiglass, plastic, rubber, or EIFS. If you do not see your substrate in this section, or are unsure of compatibility, perform a small test to determine product efficacy.



## Limitations:

**Peel Away®1** is not suitable for veneers, plywood, aluminum, or composition surfaces. It will not work on two-part epoxy or cement-based paints. When latex is the prime coat on masonry surfaces, or when removing coatings from hardwoods where the original wood finish will be revealed, use **Smart Strip® Advanced Paint Remover** instead. **Peel Away®1** may darken hardwood surfaces, mainly oak. Perform a small, inconspicuous test to determine effectiveness on your hardwood surface.

**COMPOSITION MOLDING:** Often what appears to be carved wood or decorated plaster turns out to be composition molding containing animal glue. Paint removers may damage this type of decorative molding. **Peel Away® 1** is not recommended for composition molding.

## **Product Testing:**

Always perform a test with this product BEFORE a full-scale application. Testing is the best way to ensure product effectiveness, application thickness, and proper dwell time for your specific project. Failure to do a test patch may result in failed applications, unnecessary additional applications, or application of the wrong product.

**Paint Removal Test Kits** are available at <u>www.dumondglobal.com</u> or other fine retailers. Each kit includes a sample of **Smart Strip® Advanced**, **Smart Strip® PRO**, and **Peel Away® 1** paint removers, **Dumond® Laminated Paper** (3 Sheets), **Citri-Lize® Neutralizer** (1oz), pH test kit, a scrub pad, a scraper, two brushes, and a pair of gloves. Follow the instructions provided with every kit, or those found below, to test a small, inconspicuous area of each substrate and coating.

## Surface and Air Temperatures:

**Peel Away® 1** is designed for temperatures between 50°F/10°C to 90°F/32.2°C. It can be applied outside this range; however, effectiveness may be reduced, and work time may be affected. Surface temperature is usually 10 to 12 degrees colder or hotter than the air temperature, depending on the substrate. Keep this in mind during the colder or warmer months. Product may not perform below 50°F/10°C.

## **Preparation:**

Prepare the surface by pressure washing or rinsing the substrate to remove any loose debris or coatings. Allow the substrate to fully dry before applying **Peel Away® 1**. Protect and cover all areas with plastic where paint removal is not desired.

## **Application & Spread Rate:**

## NOTE: Dumond<sup>®</sup> Laminated Paper is required to successfully use this product. Several sheets are included in every container of **Peel Away<sup>®</sup> 1**. Additional paper sold separately.

Apply **Peel Away®1** approximately 1/8" to 1/4" thick with a plastic scraper or trowel. Apply a maximum of 10 sq. ft. of **Peel Away®1** at a time before covering with **Dumond® Laminated Paper** to ensure product does not dry out. Smooth paper and ensure there are no visible air pockets. Do not allow **Peel Away®1** to harden. Refer to test for best results.



## **Dwell Time:**

The time required for softening/lifting of coatings will vary according to the number of layers, type of coating being removed, and surface temperature. Testing will help determine the proper work time. Higher temperatures will speed up the removal process, but the product may dry out more quickly. Do not allow **Peel Away® 1** to harden.

Allow at least 12 – 24 hours for **Peel Away®1** to work in temperatures ranging between 50°F/10°C to 90°F/32.2°C. Allow 24 to 48 hours for temperatures ranging between 35°F/1.7°C to 49°F/9.4°C. **Peel Away® 1** is a water-based product and will perform more slowly in colder temperatures, resulting in a longer dwell time.

## **Removal:**

Cut and score 1-2 sq. ft. of Dumond<sup>®</sup> Laminated Paper at a time to ensure exposed product does not dry out. Using a trowel or spatula, scrape and remove the waste. Scrub the 1-2 sq. ft. area clean with a sponge or nylon bristle bush and water. Rinse thoroughly with water to ensure all remaining residue is removed. Collect the paint and product residue in plastic bags and dispose of it in compliance with federal, state, and local regulations. Wash face, hands, and any exposed skin thoroughly after handling.

## **Neutralization:**

**Peel Away®1** is an alkaline paste and must be neutralized before any recoating of the surface can be done. After removal, wait 24 – 48 hours or more to ensure the substrate is completely dry. Neutralize the surface with the **Citri-Lize® Neutralizer** (provided). Instructions on how to use **Citri-Lize®** can be found on the product. Do not rinse after applying **Citri-Lize®**.

Wait an additional 24-48 hours for substrate to dry and then use provided pH Test Kit. The pH should be between 6 - 8, and moisture content should be below 12%. If the surface pH is still too high, use household distilled vinegar to lower the pH of the substrate.

## **Availability & Cost:**

**Peel Away® 1 Paint Remover** is available in 1 gallon and 5 gallon containers. **Dumond®** products are available through a nationwide network of paint and hardware stores, safety supply distributors, or online. For an in-person outlet nearest you, please visit <u>www.dumondglobal.com</u>. Once on the website, type your postal/zip code into the dealer locater to find addresses and phone numbers of your nearest dealers.



## Health & Safety Requirements:

The full Safety Data Sheet (SDS) for **Peel Away® 1** can be found online at <u>dumondglobal.com</u>. View the SDS **BEFORE** product use for required safety information.

**DANGER:** CAUSES SEVERE SKIN BURNS AND EYE DAMAGE. Contains: Calcium Hydroxide, Sodium hydroxide, Quartz Silica

Wear protective gloves and clothing, including eye and face protection. Do not breathe fumes or vapors. Wash face, hands, and any exposed skin thoroughly after handling.

If the product meets skin or hair, immediately remove all contaminated clothing and shoes and rinse skin with plenty of water or shower for at least 15 minutes. Wash contaminated clothing before reuse. Get medical attention if irritation occurs.

If the product meets eyes, immediately flush cautiously with plenty of water for several minutes. After flushing, remove any contact lenses if present and easy to do, and continue rinsing for at least 15 minutes. Contact a poison center or physician immediately.

For additional emergency assistance, please call **1-800-535-5053** in the United States. International assistance is available at **1-325-323-3500**. Both numbers are available **24/7/365**.

## Warranty:

**Dumond Inc.** warrants all its products to be free from defects and makes no other warranties with respect to its products, express or implied, including without limitation the implied warranties of MERCHANTABILITY OF FITNESS FOR PURPOSE. **Dumond Inc.'s** liability shall be limited in all events to supplying sufficient products to re-treat the specific areas to which defective product(s) have been applied. **Dumond Inc.** shall have no other liability, including liability for incidental, consequential, or resultant damages whether due to breach of warranty or negligence. This warranty may not be modified or extended by representatives of **Dumond Inc.** or its distributors and dealers.

## **Technical Services:**

Dumond Inc.'s expert staff is available to answer technical questions and provide product-specific information. For business hours, see our website for more information.

Address:	253 S. Bailey Road
	Downingtown, PA 19335
Phone:	(610)383-6061
Email:	info@dumondglobal.com
Website:	www.dumondglobal.com



## DOMOND

Issue Date: 01-Jan-2008

Revision Date: 17-Apr-2023

## Safety Data Sheet

Version 4

**1. IDENTIFICATION** 

Product identifier Product Name	Peel Away® 1 Paint Remover
Other means of identification SDS #	DCI-009R
UN/ID No	UN1823
Recommended use of the chemical	and restrictions on use
Recommended Use	Paint remover
Details of the supplier of the safety Supplier Address Dumond, Inc. 253 S. Bailey Road Downingtown, PA 19335	data sheet_
Emergency telephone number	
Company Phone Number	1-609-655-7700

INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

## 2. HAZARDS IDENTIFICATION

Appearance: Light Grey Paste

**Emergency Telephone** 

Physical state: Paste

Odor: None

Skin corrosion/irritation	Category 1 Sub-category A
Serious eye damage/eye irritation	Category 1

Signal Word Danger

Classification

#### Hazard statements

Causes severe skin burns and eye damage



## **Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection

#### Precautionary Statements - Response

Immediately call a poison center or doctor/physician

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 doctor/physician

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

## Precautionary Statements - Storage

Store locked up

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

Chemical name	CAS No	Weight-%
Calcium Hydroxide	1305-62-0	25-30
Sodium hydroxide	1310-73-2	5-10
Silica, Quartz	14808-60-7	0.001-0.5

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

Skin Contact       Wash off immediately with plenty of water for at least 15 minutes. Remove contaminate clothing and shoes. Get medical attention if irritation occurs.         Inhalation       Remove to fresh air. Immediate medical attention is required.         Ingestion       Rinse mouth. Do NOT induce vomiting. If conscious, give water or milk. Get medical attention if necessary.         Most important symptoms and effects, both acute and delayed       Symptoms         May cause severe chemical burns with reddening and pain. May cause dermatitis or irritation in some individuals upon prolonged contact. May cause severe burns to mouth, th or stomach.         Indication of any immediate medical attention and special treatment needed	4. FIRST AID MEASURES		
Skin ContactWash off immediately with plenty of water for at least 15 minutes. Remove contaminate clothing and shoes. Get medical attention if irritation occurs.InhalationRemove to fresh air. Immediate medical attention is required.IngestionRinse mouth. Do NOT induce vomiting. If conscious, give water or milk. Get medical attention if necessary.Most important symptoms and effects, both acute and delayedMay cause severe chemical burns with reddening and pain. May cause dermatitis or irritation in some individuals upon prolonged contact. May cause severe burns to mouth, th or stomach.Indication of any immediate medical attention and special treatment needed Notes to PhysicianTreat symptomatically. Individuals with chronic respiratory or skin diseases may be at ri	Description of first aid measures		
clothing and shoes. Get medical attention if irritation occurs.InhalationRemove to fresh air. Immediate medical attention is required.IngestionRinse mouth. Do NOT induce vomiting. If conscious, give water or milk. Get medical attention if necessary.Most important symptoms and effects, both acute and delayedMay cause severe chemical burns with reddening and pain. May cause dermatitis or irritation in some individuals upon prolonged contact. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause severe burns to mouth, th or stomach.Indication of any immediate medical attention and special treatment needed Notes to PhysicianTreat symptomatically. Individuals with chronic respiratory or skin diseases may be at ritically.	Eye Contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Call a physician immediately.	
Ingestion       Rinse mouth. Do NOT induce vomiting. If conscious, give water or milk. Get medical attention if necessary.         Most important symptoms and effects, both acute and delayed         Symptoms       May cause severe chemical burns with reddening and pain. May cause dermatitis or irritation in some individuals upon prolonged contact. May cause severe burns to mouth, th or stomach.         Indication of any immediate medical attention and special treatment needed       Treat symptomatically. Individuals with chronic respiratory or skin diseases may be at right of the second	Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention if irritation occurs.	
attention if necessary.         Most important symptoms and effects, both acute and delayed         Symptoms       May cause severe chemical burns with reddening and pain. May cause dermatitis or irritation in some individuals upon prolonged contact. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause severe burns to mouth, th or stomach.         Indication of any immediate medical attention and special treatment needed         Notes to Physician       Treat symptomatically. Individuals with chronic respiratory or skin diseases may be at right or stomach.	Inhalation	Remove to fresh air. Immediate medical attention is required.	
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irritation in some individuals upon prolonged contact. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause severe burns to mouth, th or stomach.Indication of any immediate medical attention and special treatment neededNotes to PhysicianTreat symptomatically. Individuals with chronic respiratory or skin diseases may be at ri	Most important symptoms and effects, both acute and delayed		
<b>Notes to Physician</b> Treat symptomatically. Individuals with chronic respiratory or skin diseases may be at ri	Symptoms	irritation in some individuals upon prolonged contact. May cause irritation to the mucous membranes and upper respiratory tract. Ingestion may cause severe burns to mouth, throat	
	Indication of any immediate medical attention and special treatment needed		
	Notes to Physician	Treat symptomatically. Individuals with chronic respiratory or skin diseases may be at risk from exposure.	
5. FIRE-FIGHTING MEASURES			

#### Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable Extinguishing Media Not determined.

## Specific Hazards Arising from the Chemical

At elevated temperatures, containers may rupture. Contents are corrosive and all personal contact must be avoided.

#### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Cool containers with flooding quantities of water until well after fire is out.

## 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures		
Personal Precautions	Use personal protective equipment as required.	
Environmental precautions		
Environmental precautions	Do not allow into any sewer, on the ground or into any body of water. See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for Containment	Prevent further leakage or spillage if safe to do so.	
Methods for Clean-Up	Keep in suitable, closed containers for disposal. Wash spill area with plenty of water. Spills and releases may have to be reported to Federal and/or local authorities. See section 15.	

## 7. HANDLING AND STORAGE

## Precautions for safe handling

 Advice on Safe Handling
 Handle in accordance with good industrial hygiene and safety practice. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Use only in well-ventilated areas. Do not eat, drink or smoke when using this product.

 Conditions for safe storage, including any incompatibilities
 Storage Conditions

 Storage Conditions
 Store in a cool, well ventilated area away from acids and other incompatible substances.

 Store locked up.
 Store locked up.

Incompatible Materials Acids. Organic halogen compounds. Nitromethane. Flammable liquid. Metals such as aluminum, tin, and zinc.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Hydroxide	TWA: 5 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust	TWA: 5 mg/m <sup>3</sup>
1305-62-0	_	TWA: 5 mg/m <sup>3</sup> respirable fraction	_
		(vacated) TWA: 5 mg/m <sup>3</sup> not in	
		effect as a result of	
		reconsideration	
Sodium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>	IDLH: 10 mg/m <sup>3</sup>
1310-73-2		(vacated) Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>
Silica, Quartz	TWA: 0.025 mg/m <sup>3</sup> respirable	TWA: 50 µg/m <sup>3</sup>	IDLH: 50 mg/m <sup>3</sup> respirable dust
14808-60-7	particulate matter	(vacated) TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> respirable
		respirable dust	dust
		: (250)/(%SiO2 + 5) mppcf TWA	
		respirable fraction	
		: (10)/(%SiO2 + 2) mg/m <sup>3</sup> TWA	
		respirable fraction	

## Appropriate engineering controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits. Use in a well- ventilated location (eg. local exhaust ventilation, fans). Showers. Eyewash stations.	
Individual protection measures, s	uch as personal protective equipment	
Eye/Face Protection	Chemical safety goggles/faceshield. Refer to 29 CFR 1910.133 for eye and face protection regulations.	
Skin and Body Protection	Wear suitable protective clothing. Rubber, neoprene, or other impervious gloves are recommended to prevent skin contact. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Reference Wiley's "Quick Selection Guide to Chemical Protective Clothing". Refer to 29 CFR 1910.138 for appropriate skin and body protection.	
Respiratory Protection	Ensure adequate ventilation, especially in confined areas. For spray application, a NIOSH approved dust respirator and eye protection. Refer to 29 CFR 1910.134 for respiratory protection requirements.	

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

Physical state Appearance Color	Paste White paste White	Odor Odor Threshold	None Not determined
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation Rate Flammability (Solid, Gas)	<u>Values</u> 12 Not determined > 100 °C / 212 °F None Same as water Not determined	<u>Remarks • Method</u>	
Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive limits	Not determined		
Vapor Pressure Vapor Density Relative Density Water Solubility Solubility in other solvents Partition Coefficient	Same as water Same as water Not determined Completely soluble Not determined		
Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties	Not determined Not determined Not determined Not determined Not determined Not determined Not determined		
Other information VOC Content (%)	50%		

## **10. STABILITY AND REACTIVITY**

#### **Reactivity**

Not reactive under normal conditions.

#### Chemical stability

Stable under recommended storage conditions.

#### Possibility of hazardous reactions

None under normal processing.

## Conditions to Avoid

Keep out of reach of children.

#### Incompatible materials

Acids. Organic halogen compounds. Nitromethane. Flammable liquid. Metals such as aluminum, tin, and zinc.

#### Hazardous decomposition products

None known based on information supplied.

## **11. TOXICOLOGICAL INFORMATION**

#### Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Avoid breathing vapors or mists. May cause irritation of respiratory tract.
Ingestion	May be harmful if swallowed.

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Calcium Hydroxide	= 7340 mg/kg (Rat)	> 2500 mg/kg (Rat)	-
Sodium hydroxide	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
Proprietary 1	= 27000 mg/kg (Rat)	-	> 5800 mg/m <sup>3</sup> (Rat) 4 h
Proprietary 3	= 1219 mg/kg (Rat)	-	-
Proprietary 4	= 4090 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	-

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

SymptomsMay cause dermatitis or irritation in some individuals upon prolonged contact. May cause<br/>severe chemical burns with reddening and pain. May cause skin and eye irritation. May<br/>cause irritation to the mucous membranes and upper respiratory tract. May cause burns to<br/>mouth and gastrointestinal corrosion.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes severe eye damage.

#### Carcinogenicity

This ingredient is a possible carcinogen when it appears as a respirable dust.

Chemical name	ACGIH	IARC	NTP	OSHA
Proprietary 2	A2	Group 1	Known	Х
legend				

Legend

ACGIH (American Conference of Governmental Industrial Hygienists) A2 - Suspected Human Carcinogen IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**STOT - repeated exposure** Respirable crystalline silica causes damage to organs (lung effects, immune system effects, and kidney effects) through prolonged or repeated exposure.

#### Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document		
Oral LD50	3,852.6 mg/kg	
Dermal LD50	6,127.0 mg/kg	

## **12. ECOLOGICAL INFORMATION**

#### Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

#### **Component Information**

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium hydroxide		45.4: 96 h Oncorhynchus mykiss	
1310-73-2		mg/L LC50 static	

#### Persistence/Degradability

Not determined.

#### **Bioaccumulation**

There is no data for this product.

#### <u>Mobility</u>

Not determined

#### Other Adverse Effects

Not determined

## **13. DISPOSAL CONSIDERATIONS**

#### Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

#### **California Hazardous Waste Status**

California Hazardous Waste Status
Corrosive
Toxic Corrosive

## **14. TRANSPORT INFORMATION**

#### Note

Based on package size, product may be eligible for limited quantity exception.

DOT UN/ID No Proper Shipping Name Hazard class Packing Group	UN1823 Sodium hydroxide, solid, mixture 8 II
<u>IATA</u> UN number Proper Shipping Name Transport hazard class(es) Packing Group	UN1823 Sodium hydroxide, solid, mixture 8 II
<u>IMDG</u> UN number Proper Shipping Name Transport hazard class(es) Packing Group	UN1823 Sodium hydroxide, solid, mixture 8 II

## **15. REGULATORY INFORMATION**

#### International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Calcium Hydroxide	Х	ACTIVE	Х	X	Х	Х	Х	Х	Х
Sodium hydroxide	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Proprietary 1	Х	ACTIVE	Х		Х	Х	Х	Х	Х
Silica, Quartz	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Proprietary 2	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Proprietary 3	Х	ACTIVE	Х	Х		Х	Х	Х	Х
Proprietary 4	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

#### Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

#### US Federal Regulations

#### **CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)		
Sodium hydroxide	Sodium hydroxide 1000 lb		RQ 1000 lb final RQ		
1310-73-2			RQ 454 kg final RQ		

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

## CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium hydroxide	1000 lb			Х

#### US State Regulations

## **California Proposition 65**

This product contains the following Proposition 65 chemicals.

**Health Hazards** 

3

Chemical name	California Proposition 65		
Silica, Quartz	Carcinogen		

#### U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Calcium Hydroxide 1305-62-0	X	Х	X
Sodium hydroxide 1310-73-2	X	X	Х
Silica, Quartz 14808-60-7	Х	X	Х

## **16. OTHER INFORMATION**

Flammability

NFPA

HMIS

Issue Date: **Revision Date: Revision Note:** 

Not determined Not determined **Health Hazards** Flammability 0

01-Jan-2008

17-Apr-2023

Regulatory update

Instability Not determined Physical hazards 0

**Special Hazards** Not determined **Personal Protection** Not determined

#### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**