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202 NEW MASONRY DETERGENT

1. PRODUCT DATA

Date of Preparation: March 1, 2015

Product Name: 202 New Masonry Detergent

Producer: Diedrich Technologies, A Hohmann & Barnard Company, 310 Wayto Road, Schenectady, NY 12303

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This product is manufactured for Commercial/Industrial use. Not recommended for household use.

2. PRODUCT DESCRIPTION:

Diedrich 202 New Masonry Detergent is a combination of organic and inorganic acids, wetting agents and inhibitors for use in the final clean up of new masonry. It efficiently cleans off residual mortar, day to day soiling, and staining that occurs on job sites. It will work on brick, stone, tile, exposed aggregate and several varieties of new masonry construction not susceptible to metallic staining. 202's wetting agent and inhibitors permit it to cling to masonry surfaces for an extended dwell period. This extended dwell time permits a safer low acid concentration to be used in comparison to the customary harsh muriatic acid washes. This results in equal if not better cleaning while exposing the masonry to less actual acid. It quickly loosens mortar residue and when removed with high or low pressure water virtually all residue will be washed away with little or no agitation. When used as directed, 202 New Masonry Detergent will not cause acid burns or streaks. Diedrich 202, being a concentrate is a versatile product that can be diluted as job conditions dictate.

(Example: 1 gallon of 202 New Masonry Detergent can be diluted to make from 5 to as much as 50 gallons).

3. LIMITATIONS

202 is not recommended for use where manganese or metal fillers have been added to brick and tile. Extra care should be taken when used on glazed substrates and colored mortar (see **Diedrich 202V Vana-Stop**). **Test applications must be performed to ensure there are no adverse reactions**, such as bleaching and etching. 202 will not clean pollution and carbon deposits, or smoke and

fire residue from masonry and stone surfaces. **See product literature on Diedrich Restoration Cleaners.**

4. TEST PROCEDURES

A test patch approximately 4 ft x 4 ft. is required to be cleaned prior to full scale operations. The test areas are necessary to determine compatibility and required end results. Individual masonry types must be tested. Inspection of the test areas should occur after a 3 to 7 day dry time. The test patch should be available for the architect to inspect and approve, then remain as the standard for the project.

5. DILUTIONS

As with any acid based material like 202 New Masonry Detergent, water used for dilution should be placed in a rubber or polyethylene container first, then slowly add the 202 New Masonry Detergent. **Metal containers and tools are never to be used as acids and their fumes will have a detrimental effect on such containers and could explode.** The suggested dilution rates based on one part 202 New Masonry Detergent to various parts water are as follows. Adjustment of rates of dilution may be necessary as indicated by the test patches.

CONCRETE & CLAY BLOCK

1 part 202 to 4 parts water

HARD BURNED PINK, SALMON & TAN BRICK, EXPOSED AGGREGATE CONCRETE, & STRUCTURAL TILE (UNGLAZED)

1 part 202 to 6 parts water.

RED BRICK

1 part 202 to 6 – 8 parts water.

SANDSTONE, OHIO BLUESTONE & OTHER POROUS STONES

1 part 202 to 8 parts water.

(Note: If metallic stains/discolorations are evident or appear, use 202V Vana-Stop.)

SPECIALTY PREFACED CONCRETE BLOCK & TILE

1 part 202 to 8 parts water.

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**SMOOTH FINISHED PRECAST AND
CAST IN PLACE CONCRETE**

1 part 202 to 10 parts water

POLISHED STONE (GRANITE AND MARBLE)

1 part 202 to 20 parts water.

(Caution: 202 New Masonry Detergent might etch a polished stone surface. Great care must be exercised and testing conducted to ensure etching will not occur.)

STRUCTURAL AND CERAMIC GLAZED TILE AND BRICK

1 part 202 to 10 – 12 parts water.

FOR BURNISHED MASONRY

Refer to Diedrich 222 Cultured Stone and Burnished Masonry Clenser.

METALLIC STAINS/DISCOLORATIONS

Many of today's new colored brick may contain metallic oxides, which cause green and brown stains, as they move to the face of bricks. Where substantial quantities exist in brick or these metallic oxides, incorrect dilution of Diedrich 202 New Masonry Detergent, in-part may cause an occurrence of oxide staining. If metallic stains are present prior to testing or appear after, do not use 202 New Masonry Detergent, rather use 202V Vana-Stop. **It is imperative that all directions in this spec sheet and product label be adhered to.**

6. PREPARATORY WORK

When product is to be used on occupied building, the following steps should be taken to protect building occupants from fumes. Close all windows and cover air intake and exterior air-conditioning vents. Also shut down air handling equipment during application and for 30 minutes following.

It is highly recommended to complete all masonry cleaning prior to installation of non-masonry items that would be adversely affected by the 200, 202, 202V Vana-Stop. Some of these would be doors, windows, light fixtures, hardware etc. If they are already in place, extreme care and thorough protective covering and adequate ventilation should be used to prevent damage from contact and fumes.

All sealant and caulking materials must be in place and cured, per manufacturer's specifications, prior to commencement of the cleaning process. Employ all necessary precautions and covering to prevent unnecessary damage to the building being cleaned as well as surrounding buildings, vegetation, landscaping, electrical, anodized aluminum, asphalt roofing, cars and all other adjacent items with plastic coverings and watersoaking.

Avoid drift and/or overspray as it may injure passersby or damage vehicles. Divert traffic. Will not damage regular glass.

**KEEP OUT OF THE REACH OF
CHILDREN AND ANIMALS.**

All surfaces are to be thoroughly pre-soaked with water to prevent absorption of the 200, 202 or 202V Vana-Stop into the pores of the masonry. It is recommended to place a lawn soaker hose along the top of the wall to ensure a complete and uniform pre-soaking of the area to be cleaned. A second hose shall be used to provide a flow of water to insure a thorough flushing from the cleaned area of the excess mortar and dirt. If the structure is a multistory building a lawn soaker hose should be fitted to the face of the scaffold/stage to ensure a Continuous wetting of the areas below that which is being worked on.

The most effective and satisfactory cleaning and results can be expected if commencement of cleaning occurs within 14 to 28 days of masonry installation. Mortar and grout residue/smears allowed to remain on the surface beyond this time frame will be difficult to clean off and with less than desirable results.

7. APPLICATION:

Exterior Surfaces: *Test patches must be accomplished prior to full scale cleaning.*

1. Pre-soak a large area thoroughly with water.
2. Application of properly diluted 200, 202 or 202V can be by either a dense, soft masonry brush or low pressure (40 - 50 psi) airless sprayer of a corrosive/acid resistant type such as DIEDRICH TECHNOLOGIES ACID EXPRESS PUMP. Apply diluted 200, 202 or 202V Vana-Stop freely to ensure complete coverage.
3. Dwell time on the wall surface should be about five minutes. Allowing the cleaner to dry on the surface may result in stains and residue.
4. To remove heavy buildup of excess mortar or grout, reapply the 200, 202 or 202V solution and use a wooden scraper or piece of brick to scrape off the excess, using care not to damage the surface of the masonry.

NOTE: Whenever possible try to avoid additional applications as they may cause a white scum detergent film to appear on the brick. If mortar deposits do not dissolve with the first application, longer dwell time may be required, but not to the point the 200, 202 or 202V dries into the surface.

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5. Using fresh water thoroughly rinse the masonry surface for thorough removal of chemical residue, free sand and other loose material and debris. For optimum results application of rinse water should be with a pressure washer fitted with a 25°-40° fan type tip providing at least 400 psi at 4 to 6 gallons per minute of water is recommended.

NEVER APPLY DIEDRICH 200, 202 OR 202V WITH SPRAY EQUIPMENT GENERATING MORE THEN 50 PSI. EXCESSIVE PRESSURE WILL CAUSE THE CHEMICAL TO BE DRIVEN DEEPLY INTO THE SUBSTRATE. COMPLETE RINSE REMOVAL WILL PROVE DIFFICULT.

NOTE: Lower areas of a wall being cleaned must be kept wet and rinsed of cleaning residue to prevent a streaked appearance. Also, the cleaner must be thoroughly rinsed off the masonry before it begins to dry onto the masonry. If the masonry is not adequately prewet before the cleaner is applied and/or if the rinse is hurried and not completely thorough, a “white scum” film residue will appear when dry and may be very difficult to remove. **Refer to Diedrich 930 White Scum Remover specifications.**

Interior Surfaces: Follow all test and preparation procedures applicable to exterior work; **ie. test patches, prewetting, protective coverings.** Interior new masonry construction cleaning projects should be completed before finished flooring, trim work, any type of metal fixtures or any other non-masonry material are put in place. If said materials have already been installed, take all necessary precautions to prevent damage from contact with the solution and its fumes by covering with polyethylene sheets and supplying ventilation adequate to prevent accumulation of fumes in concentrations that could cause damage. Clean following procedures for exterior cleaning. In lieu of rinsing with a hose or pressure wash, a sponge or soft bristled brush can be used to apply the fresh water necessary to thoroughly rinse the cleaning solution.

If job conditions dictate limited water-use below that required for a thorough rinse, the following steps should be taken:

1. Rinse with as much fresh water as is permitted.
2. Mix a neutralization rinse consisting of 1 gallon of fresh water and 2 oz. of household ammonia.
3. Apply the neutralizing solution liberally to the saturation point. Allow a dwell time of approximately minutes.
4. Rinse again with fresh water.

8. EFFLORESCENCE:

Efflorescence is a deposit of white powdery soluble salts, that sometimes appears on the surface of masonry or concrete construction. Often efflorescence is apparent just after the structure is completed, when the builder, architect and owner are most concerned with the appearance of the new structure.

The most common salts that contaminate masonry are sulfates, chlorides, nitrates and phosphates, which are associated with acid rain and air pollution. A combination of circumstances cause this crystalline deposit. First, there must be a source of water soluble salts in the masonry. Second, moisture must be present to pick up the soluble salts and transfer them to the surface. Third, some force, evaporation or hydrostatic pressure, will cause the solution to migrate. The force of this crystallization, like a disease, can cause the masonry to disintegrate and spall. If any one of these conditions is eliminated, efflorescence should not occur.

In most cases, salts that cause efflorescence come from construction materials, masonry units, or mortar.

The best analogy is to call it a masonry infection that possibly requires 2 to 3 treatments of Diedrich detergents over a period of a month to neutralize and eliminate this powdered surface (like using antibodies for infections). Moisture may also enter a masonry wall due to vapor from the interior of a building and accumulate within the wall as it condenses, or rainwater may enter the masonry during construction. Proper protection can alleviate this problem. Common sources of excessive moisture entry are water related: rain, roof drainage, leaky gutters and downspouts, missing or eroded mortar, soft porous or deteriorated masonry, window sills, failure to protect new masonry walls, etc.

Efflorescence is a normal construction phenomenon called new or old “BUILDING BLOOM”. Once the building is waterproofed, *we can expect a certain amount of efflorescence caused by residual construction moisture.* Post World War II brick, containing vanadium and manganese, could leach out as yellow, green, or brown stains, so use Diedrich 202V Vana- Stop only, on these bricks.

Efflorescence Removal: The dilution ratio should be 5 to 10 parts water or stronger to 1 part 200,202, 202V. The application dwell time should be approximately 10 minutes followed by a garden hose low pressure trickle-like water fog/mist rinse. Do not use high pressure washer or a beaded garden hose spray because great amounts of pounding water will activate more efflorescence to the surface.

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NOTE: INSPECT FOR AND CORRECT WATER ENTRANCE PROBLEMS AT DETERIORATED MASONRY AND MORTAR JOINTS, FLASHINGS, EAVES, GUTTERS, DOWNSPOUTS AND ANY OTHER DRAINAGE PROBLEMS PRIOR TO REMOVING EFFLORESCENCE. These problem areas should be corrected before 200, 202 or 202V Vana-Stop application and removal. **If efflorescence reappears, it tells you there is a leak or moisture movement in the building.** When the problem is found and repaired, the cause of the efflorescence is usually eliminated.

ONCE THE DIEDRICH CLEANER TREATMENTS HAVE NEUTRALIZED THE MASONRY, THE SURFACE MUST BE SEALED TO PREVENT MOISTURE INTRUSION THAT CAN INCUR FURTHER FORMATION OF THE SALT DEPOSITS.

DIEDRICH WATER REPELLENTS ARE DESIGNED TO PREVENT THE FORMATION OF EFFLORESCENCE. ALLOW MASONRY TO DRY SUFFICIENTLY (3-5 DAYS) DEPENDING ON WEATHER CONDITIONS BEFORE APPLYING DIEDRICH WATER REPELLENTS **300C, 303-SILOXSEAL, OR 333-OMEGASEAL.**

9. ALTERNATE USES

Diedrich 200, 202, and 202V Detergents can be used in other applications where muriatic acid is prohibited by all brick manufacturers:

1. Removal of form oils and membrane compounds from concrete surfaces.
2. Remove paper fiber form stains embedded in concrete.

3. Remove plaster stains and residue from concrete surfaces.
4. Clean precast and exposed aggregate panels in-house and on job sites.
5. Remove algae and water deposits from swimming pools.
6. Remove calcium and water deposits from swimming pool filters.
7. Etching concrete surfaces.

Before using 200, 202 or 202V Detergents for the above applications, a thorough test must be performed to assure the desired results without detrimental effects to the surface.

10. OTHER INFORMATION

Availability: Available through a network of 2000 distributors and over 2100 experienced contractors located throughout the United States, Canada, Mexico, South America, and Europe.

Maintenance: Surfaces cleaned by Diedrich products require no maintenance. For safety and to avoid contamination of the product, chemical containers should be tightly sealed while in storage.

ENVIRONMENTAL PROTECTION SYSTEM:
USE DIEDRICH NEUTRA-SOAK "A" (FOR ACIDS), WHICH IS A DRY ABSORBENT COMPOUND, FOR SPILLAGE AND TO DIKE/CONTAIN AND COLLECT WASH-OFF RESIDUE FOR SAFER DISPOSAL AND TO ADDRESS LOCAL ENVIRONMENTAL REQUIREMENTS

WARRANTY: ALWAYS USE A TEST SAMPLE TO DETERMINE DESIRED RESULTS. PRODUCT FREEZES BELOW 32°F, AND MAY BE ADVERSELY AFFECTED BY COLD WEATHER.

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