SAUEREISEN

# NOVOLAK VEGLAZE NO. 472

## PHYSICAL PROPERTIES

| | |
|---|---|
| Application time | |
| Working time at 70ºF | 30 minutes |
| Initial set at 70ºF | 2 hours |
| Bond strength to concrete (ASTM D-4541) | Concrete failure |
| Components | 2 parts |
| Maximum service temperature | |
| continuous exposure | 350ºF (176.6ºC) |
| intermittent or flue gas exposure | 400ºF (204ºC) |
| Thickness | |
| Wet | 10 mils (0.25 mm) |
| Dry | 7 mils (0.18 mm) |
| VOC Content (EPA Method 24) | 430 g/L |
| Volume Solids | 60.7% |

Physical properties were determined on specimens prepared under laboratory conditions using applicable ASTM procedures. Actual field conditions may vary and yield different results; therefore, data are subject to reasonable deviation.

Sauereisen NovolaK VEGlaze No. 472 is a coating used for the chemical-resistant construction of sumps, ducts, containment areas, trenches, walls, and other support columns or bases. VEGlaze may be used as a thin barrier of corrosion resistance or as a topcoat for other Sauereisen vinyl ester linings and polymer concretes. The VEGlaze system utilizes Sauereisen VEPrime No. 550 as a bond enhancing primer.

NovolaK VEGlaze No. 472 is specifically formulated to accommodate vertical and overhead applications. No. 472 can be applied by roller or spray as an economical option to protect concrete and steel in the power, petrochemical and pulp & paper industries.

## CHARACTERISTICS

- ☐ NovolaK Vinyl ester polymer offers superior chemical resistance.
- ☐ Spray or roller application.
- ☐ Fast chemical set - less down time.
- ☐ Easily cleaned surface.
- ☐ Low porosity.
- ☐ High Temperature resistant for flue gas applications.

## AREA PREPARATION

**Temperature of Working Area**

Maintain a temperature of 60º-85ºF on air, substrate, Hardener and Resin components during mixing, application, and cure. The materials and substrate should be maintained at 65ºF to 80ºF for 48 hours prior to beginning work.

At temperatures below 60ºF, the application becomes more difficult and curing is retarded.

Above 85ºF, the material working time decreases. It is recommended that the material components be stored in a cooler area prior to mixing. Shading the substrate and using ice water to cool mixing equipment is not uncommon. In extreme temperatures it may be necessary to postpone the application or to apply during cooler hours.

**Surface Preparation**

Surfaces should be dry and made free of oil, grease and other contaminants that may inhibit bond. This can be achieved by chemical cleaning.

*Concrete* - Refer to SSPC-SP13/NACE 6 "Surface Preparation of concrete" for detailed guidelines.

*New Concrete* - Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and obtain uniform surface texture.

*Old Concrete* - Concrete must be dry, firm and structurally sound as specified by the architect/engineer. All structural cracks must be repaired.

Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and to obtain a uniform, sound substrate.

If abrasive or high-pressure water blasting is used as the method of surface preparation, all sand and/or debris must be removed by thoroughly vacuuming the area with an industrial vacuum cleaner. If surface does not have desired characteristics, repeat surface preparation procedure.

*Metal* - Abrasive blast to a nominal 2.5 mil profile employing SSPC-SP5 White Metal Blast for immersion and SSPC-SP10 for other service conditions. All welds must be continuous, free of flux and have a smooth rounded radius without any sharp edges or protrusions.

## EXPANSION/CONTROL JOINTS

Joints are to be provided on 20' centerlines, around all fixed objects and peripheries of rooms, and over all points of movement in the base slab. The joint should then be filled with the appropriate expansion joint filler. Consult Sauereisen for recommendations.

## APPLICATION

**Mixing**

VEPrime No. 550 and NovolaK VEGlaze No. 472 are each packaged in premeasured containers consisting of Hardener Part A and Resin Part B which must be mixed together before use. Individual components should be remixed before combining. The following procedures are applicable to the mixing of both products.

Completely empty contents of Hardener Part A into Resin Part B container. Using a slow-speed drill motor with a "Jiffy" type blade, mix for a minimum of three minutes until thoroughly blended.

Mix only complete batches. Material which has begun to set must be discarded. Do not try to retemper the material.

**Installation**

**VEPrime No. 550 -** Apply primer to a thickness of 5-10 mils using a short nap roller with a non-degradable core or a nylon brush. For more information on VEPrime No. 550, consult the specific Sauereisen data sheet.

**NovolaK VEGlaze No. 472**

*Roller application* - Material should be delivered to finishers and spread into a continuous bead immediately after mixing. Do not let mixed material remain in the mixing vessel. If the application is for floor areas, spread the material with a squeegee to the desired thickness. To improve the surface texture, lightly backroll the material with a short nap adhesive roller with a non-degradable core. For vertical applications, material shall be lightly backrolled to the desired thickness. All finishing and backrolling must be completed within 30 minutes from mixing.

*Spray* - Application by spray should be done in a single coat of ten mils wet film thickness. This will result in a dry film thickness of seven mils. If applying a second coat, allow a minimum of four hours between coats at 70°F. If 24 hours elapse before the application of the second coat, sand the surface, solvent wipe and remove any debris prior to re-coating.

Spraying should be done with a 50% overlap in a "cross hatch" pattern to reduce the possibility of pinholes and to assure complete coverage. If spray application is chosen, contact Sauereisen for complete details on equipment requirements. The following equipment is typically used for spray application:

Airless Spray Pumps - NovolaK VE Glaze No. 472 may be sprayed with a minimum 45:1 piston-primed, airless pump such as the model formerly manufactured by Graco. Alternative equipment such as the Graco 56:1 King Piston Primed Airless, Model 236-477 is also suitable. The current specification is the Graco Xtreme Sprayer X60 - MDL#X60-DH4. Remove all filters including the filter from surge tank.

Other pumps may be suitable, depending on the job site requirements.

Moisture Air Dryer - RFI Model DA-300 or equivalent. Moisture air dryer must be placed at least 50' from air compressor on air line.

Gun - Graco's Ultra-Lite pistol grip Flo-Gun, Model 235-628 is preferred. This gun must be combined with Seat Adapter Model 235-006. Alternatively, the Graco Flo-Gun Model 224-991 is acceptable.

Gun tip -Use Tip Housing Part No. XHD-001 with Graco Reversa Tips MDL No. XHD with orfices of 0.025 to 0.031 inch tip works best. Alternative brand tips may be suit-able, however, never use tips that contain a diffuser pin.

Material hose - 6' whip end, 3/8" i.d.; working pressure 5,000 psi, 16,000 psi burst.

Material hose - 0-25' overall, 1/2" i.d.; working pressure 4,000 psi, 16,000 psi burst.

Material hose - 25-75' overall, 3/4" i.d.; working pressure 4,000 psi, 12,000 psi burst.

Air compressor - 180 $ft^3$ per minute at 100 psi, minimum.

Air hose from compressor - 3/4" to 1" i.d.: 100' maximum length to mastic pump.

## COVERAGE

**VEPrime No. 550**

260 $ft^2$ per one gallon unit at 6 mils wet film thickness, resulting in a dry thickness of approximately 5 mils.

**VEGlaze No. 472**

160 $ft^2$ per gallon at 10 mils wet film thickness, resulting in a dry thickness of approximately 6 mils.

All coverage data is theoretical and will vary depending upon surface conditions, porosity, application techniques and project specific conditions.

## SETTING/CURING

VEPrime No. 550 may be topcoated after twelve (12) hours at 70°F. If the duration before topcoating exceeds 24 hours, consult Sauereisen for proper solvent wipe procedures.

NovolaK VEGlaze No. 472 will take an initial set in two hours at 70°F. Do not allow water or chemicals on the material surface for a minimum of 24 hours. For temperatures below 70°F, cure a minimum of 72 hours prior to water or chemical exposure.

## PACKAGING

VEPrime No. 550 is packaged in a one gallon unit that include:

Part A Hardener
0.18 pounds in a 4 ounce bottle

Part B Liquid
7.0 pounds in a 1 gallon can

**Packaging** ***(continued)***

Unitized packaging for NovolaK VE Glaze No. 472 includes:

**Gallon Units:**
Part A - Hardener
0.1 lbs. in a 4 ounce plastic bottle

Part B - Liquid (Resin)
10.0 lbs. in a 2-1/2 gallon metal pail

**Large Unit ("T" / 3 gallon unit)**
Part A - Hardener
0.30 lbs. in a 4 ounce plastic bottle

Part B - Liquid (Resin)
30.0 lbs. in a 5 gallon metal pail

* Containers are filled by weight, not volume. Approximate weights for the gallon and 2.5 gallon units are 10.1 pounds and 31.30 pounds, respectively.

## CLEAN-UP

All equipment should be cleaned by scrubbing with a stiff brush and MEK or MCT (monochlorotoluene) at the end of each working period or when build-up becomes pronounced.

## SHELF LIFE

Sauereisen VEGlaze No. 472 has a shelf life of three (3) months, when stored in unopened, tightly sealed containers in a dry location at 70ºF. Avoid freezing. If there is a doubt as to the quality of the materials, consult a Sauereisen representative.

## CAUTION

Consult Material Safety Data Sheets and container label Caution Statements for hazards in handling these materials.

## LEGAL NOTICE



## WARRANTY

We warrant that our goods will conform to the description contained in the order, and that we have good title to all goods sold. WE GIVE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE OR OTHERWISE, EXPRESS OR IMPLIED, OTHER THAN AS EXPRESSLY SET FORTH HEREIN. We are glad to offer suggestions or to refer you to customers using Sauereisen cements and compounds for a similar application. Users shall determine the suitability of the product for intended application before using, and users assume all risk and liability whatsoever in connection therewith regardless of any suggestions as to application or construction. In no event shall we be liable hereunder or otherwise for incidental or consequential damages. Our liability and your exclusive remedy hereunder or otherwise, in law or in equity, shall be expressly limited to our replacement of nonconforming goods at our factory or, at our sole option, to repayment of the purchase price of nonconforming goods.

- **Distributors and agents in major cities throughout the world. Consult manufacturer for locations.**
- **Information concerning government safety regulations available upon request.**
- **Sauereisen also produces inorganic compounds for assembling, sealing, electrically insulating and grouting.**

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