

DESCRIPTION

Patinaetch is a mildly acidic water-based solution designed to etch and stain concrete surfaces. The chemical reaction with the substrate results in naturally variegated earth tones similar to the oxidation of a copper roof or the patina of a bronze sculpture.

Patinaetch is used as a method of adding variegated color to concrete, stucco and masonry surfaces such as interior or exterior floors, walls and even sculptures. These variegations are not defects but are in fact the reason for selecting this method of coloration. Unlike paints or coating these stains do not cover up, but rather work with the existing surfaces and possibly highlight irregularities.

ADVANTAGES

- Easy clean-up...leaves very little residue
- Chemically fuses with the substrate
- Non-film forming
- UV resistant
- Zero VOC

COLOR EFFECTS

Patinaetch is available in seven standard colors. The colors effects produced from these colors are unique to each concrete surface and could differ significantly from the color chart. Various color effects can be created by:

- Spray different *Patinaetch* colors on top of each other
- Blend two or more *Patinaetch* colors prior to staining
- Broad casting materials like ironite, miracle gro, copper chloride, saw dust, rice, etc.

APPLICATION

Complete an on-site sample prior to staining the surface. Color outcomes may vary considerably due to temperature, concrete age and surface profile. Always be fully aware of surface contaminants (e.g., curing compounds, sealers, paints, oils, grease, etc.). Do not acid wash before applying *Patinaetch*, as this will remove the free lime needed for its reaction. Sand the surface prior to staining using a floor polisher/maintainer with 50-100 grit mesh or sand paper. This serves number of functions, it opens the concrete pores, eliminates a degree of surface tension, removes surface contaminants and weak non-hydrated cementitious particles. Surface must be clean and dry prior to applying *Patinaetch*. These factors have a considerable influence on determining the success of the *Patinaetch* application. Apply stain with all plastic airless pump sprayer (no brass spray nozzles).

Patinaetch is generally applied in 2 coats. You should notice an acidic fizzing reaction. This is a good sign that the surface is accepting the stain. Two methods of applying stain are:

Method 1: Spray two coats from approximately 12" above the surface making sure not to leave puddles or create run marks. The first coat should be touch-dry before spraying the second coat. Use Method 1 when the concrete surface is porous, accepts the stain readily and does not bead on top.

Method 2: Simultaneously spray and scrub the 1st coat with a nylon broom using a circular motion and immediately respray with the second coat over the just scrubbed surface. This will flatten out any broom marks. Be careful not to broom excess stain onto unsprayed areas. Use Method 2 when the concrete surface is impervious and the sprayed patina beads on top.

On very hard concrete it may be necessary to boost the muriatic acid content of the stain (e.g., one part muriatic acid with six parts *Patinaetch*) this will ensure better color penetration. During application, the surface should be uniformly saturated with the liquid stain. A wet edge must be maintained. Do not splash, drip, or allow the *Patinaetch* to puddle in joint areas or other depressions. Do not step on the wet surface. Foot prints will appear after surface has been cleaned and are likely to be darker than the adjacent areas. If stepped on by accident, the footprints should be brushed out immediately. When applying *Patinaetch* to vertical surfaces, application should start at the bottom and work upward. Excessive run down should be avoided.

RINSING AND CLEANING

After the final coat of *Patinaetch* has dried, scrub and rinse the concrete surface with clean water. Scrub with either a medium bristle broom or floor maintainer. Use both a squeegee and wet-vac to remove unwanted residue. Finally rinse off with clean water and wet-vac dry. Do not leave any puddles on the concrete surface as these will cause water stains. Expansion joints should also be left dry.

COVERAGE

Coverage will depend on both temperature and concrete condition. It varies from 150-300ft²/gal at full strength for each coat. When use on fully cured concrete, it is quite common to dilute *Patinaetch* (ratio of 1:1 or a ratio 1:3) with a diluting solution, which will lighten the color. This diluting solution should be made from muriatic acid and water (e.g., 10parts water to 1 part muriatic acid), which should be suitable for a typical concrete surface.

HEALTH CAUTION

Corrosive Liquid – It can cause eye and skin burns. Can cause severe eye irritation, and possible blindness. The vapor or mist can cause irritation of the nose, throat and lungs. Contains hydrochloric acid. Do not get in eyes, on skin or clothing. Wear an acid vapor mask (NIOSH/MSKA TC 23C approved), goggles, gloves, protective clothing, chemical resistant apron and boots. Use with adequate ventilation. Do not breathe vapor or mist. Close containers after use. Store in tightly closed containers in an upright position. Keep away from combustible materials and all heat sources.

If contact is made flush contaminated areas immediately with water. Remove contaminated clothing and seek medical attention.

Eyes: Hold eyelids apart while flushing material out using large amounts of clear water.

Ingestion: Drink several glasses of water or milk. Get medical attention immediately.

Skin: Wash thoroughly with soap and water. Remove contaminated clothing and footwear and wash before reuse. Dispose of contaminated shoes.
Inhalation: Move to fresh air at once. If symptoms develop or persist, seek medical attention.

AVAILABILITY

Patinaetch is available throughout the United States and Canada. Contact *Düraamen* representative in your area for details.

TECHNICAL SERVICE

Düraamen Engineered Products, Inc. provides services and consultations on material selection, specification, troubleshooting, and other information on the proper repair and protection of concrete surfaces.

NOTE: Patinaetch is manufactured by Smart Surface Technology Inc., Richmond, BC Canada and marketed by Düraamen Engineered Products Inc.

WARRANTY

Düraamen Engineered Products Inc. warrants for a period of one (1) year that its products will be free of manufacturing defects and will be in conformity with published specifications when handled, stored, mixed and applied in accordance with recommendations of *Düraamen*. If any product fails to meet this warranty, the liability of *Düraamen* will be limited to replacement of any non-conforming material if notice of such non-conformity is given to *Düraamen* within (1) one year of delivery of materials. *Düraamen* may in its discretion refund the price received by *Düraamen* in lieu of replacing the material. No customer, distributor or representative is authorized to change or modify the published specifications of this warranty in any way. No one is authorized to make oral warranties on behalf of *Düraamen*. In order to obtain replacement or refund the customer must provide written notice containing full details of the non-conformity. *Düraamen* reserves the right to inspect the non-conforming material prior to replacement. EXCEPT FOR THE EXPRESSED WARRANTY STATED ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. DÜRAAMEN'S OBLIGATION SHALL NOT EXTEND BEYOND THE OBLIGATIONS EXPRESSLY UNDERTAKEN ABOVE AND DÜRAAMEN SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO THE PURCHASER OR ANY OTHER THIRD PARTY FOR ANY LOSS, COST, EXPENSE, DAMAGE OR LIABILITY, WHETHER DIRECT OR INDIRECT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Corporate office

Düraamen Engineered Products Inc. 457 Frelinghuysen Avenue, Unit 101, Newark, NJ 07114
T: 1.866.835.6595 | F: 1.866.629.4157
info@Düraamen.com