



RELEASE AGENT #10

Maximum performance, chemically active concrete form release agent specifically formulated for use on dense, non-absorptive forms.

**Petroleum Based Version = RELEASE AGENT #10 • Water Based Version = RELEASE AGENT #10 E
International/Precast Version = RELEASE AGENT #10 IP**

HOW IT WORKS

RELEASE AGENT #10 (RA #10) reacts chemically with the alkalies in concrete to form a soapy film which allows trapped air and excess water to escape during vibration, minimizing surface voids and providing a smooth, uniform concrete finish. When used on steel, they react with the iron present on the form surface to form a film that retards rust formation between pours.

APPLICATIONS

- ◆ Use on dense, non-absorptive form surfaces such as steel, plastic, fiberglass and HDO, PSF and CBF plywood forms.
- ◆ Ideal for precast and commercial forming operations where forms see daily use or are subject to aggressive stripping schedules and where architectural concrete surface appearance is a primary objective.

ADVANTAGES

- ◆ Greatly minimizes concrete surface voids (bugholes).
- ◆ Provides a crisp, positive release.
- ◆ Produces uniformly white architectural surfaces.
- ◆ Fast drying.
- ◆ Minimizes form cleaning and maintenance costs -- forms become self-cleaning with continued use.
- ◆ Low viscosity, chemically active formulation allows application at very high coverage rates, reducing costs.
- ◆ Non-staining.
- ◆ Hydrotreated naphthenic diluents reduce skin and odor irritations common with traditional solvent or petroleum based release agents.
- ◆ Does not impair the natural bonding characteristics of subsequently applied paint or other concrete surface coatings.
- ◆ Minimizes rust formation between pours.
- ◆ Less sensitive to application rate variations than other chemically active release agents.
- ◆ Available in a low 250 g/l VOC compliant version (RA #10), an international/precast version (RA #10 IP) and a water based version (RA #10 E). RA #10 E is also available in a concentrated version which is shipped in a short-filled container.

- ◆ Petroleum based versions spray easily at temperatures down to -30° F (-34° C).
- ◆ RA #10 E is Green Engineered™ – better for health and the environment.
- ◆ RA #10 and RA #10 E comply with the more restrictive 250 g/l VOC requirements of some states.

▲ PRECAUTIONS ▲

- ◆ Water based, chemically active form release agents are not visible on applied surfaces once dry. This is normal and does not affect release agent performance. After form stripping, a white, powdery film will be present on form surfaces. This causes no adverse effects on the form or the concrete and should not be confused with buildup.
- ◆ Do not use on aluminum, medium density overlaid plywood (MDO) or absorbent wood form surfaces. NOX-CRETE'S ALUMI-NOX release agents are recommended for aluminum form surfaces. For medium density overlaid plywood (MDO) or absorbent wood form surfaces, NOX-CRETE FORM COATING is recommended.
- ◆ Do not use on any type of foam or rubber form surface. NOX-CRETE FORM COATING E, PCE and BIO-NOX are generally suitable for use on these form surfaces. Conduct a test application to verify compatibility prior to use.
- ◆ Applications to nonabsorbent plastic or fiberglass forms may be subject to removal by heavy rain. In these situations, the use of NOX-CRETE PCE is recommended.
- ◆ RA #10 E is not intended for application under freezing conditions. (Freezing temperatures have no effect on petroleum based versions of RA #10.)
- ◆ Protect RA #10 E from freezing. If allowed to freeze, product packaging may rupture and the emulsion stability of this product may be affected, making it difficult to keep product mixed during application. Product which is suspected of freezing should not be used.
- ◆ Verify that product is within the "USE BY" date stated on product packaging. Do not use expired product. The use of expired product may result in poor product performance or failure.



chemical solutions to concrete problems

USE INSTRUCTIONS

- ◆ Request current product literature, labels and material safety data sheets from manufacturer and read thoroughly before product use.
- ◆ Site environmental conditions, substrate conditions and concrete mix design have a major effect on product selection, application methods, procedures and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate production test application by the purchaser or installer in advance of field scale use is mandatory (irrespective of any other verbal or written representations) to verify that product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- ◆ Form surfaces should be reasonably dry and clean prior to application.
- ◆ For architectural or exposed concrete surfaces, remove all concrete build-up, rust, mill scale and existing form oil residue before application.
- ◆ RA #10 E in the concentrated version is shipped in a short-filled container and requires dilution by filling the container to capacity with water and mixing well. RA #10 E should be mixed well before each use. The use of NOX-CRETE'S specially designed drum agitator for mixing 55-gallon drums and tote agitator for mixing 275-gallon totes is recommended.
- ◆ Spray application is recommended using THE NOX-CRETE PERFECT FORM & CONCRETE SPRAYER or THE NOX-CRETE PERFECT POWER SPRAYER. Both are equipped with the proper nozzle size to ensure uniform product distribution.
- ◆ Typical application range on steel, plastic and resin-coated wood forms is 2,500 - 3,000 sf/gal. (62-75 sm/l).
- ◆ Do not over apply. Excess material, runs and puddles can adversely affect performance and should be picked up promptly with rags.
- ◆ Prevent material overspray from contacting reinforcing steel and/or prestressed cables.
- ◆ Overspray and application equipment can be cleaned with mineral spirits.

TECHNICAL DATA

Bulk Density

Petroleum Based Versions 7.0 lbs/gal (0.84 kg/l)
Water Based Versions 8.1 lbs/gal (0.97 kg/l)

Pour Point, ASTM D-97

Petroleum Based Versions -30° F (-34° C)
Water Based Versions NA

Flash Point, ASTM D-93

Petroleum Based Versions >100° F (38° C) PMCC
Water Based Versions >200° F (94° C) PMCC

Color, ASTM D-1500

Petroleum Based Versions 0.5 - 1.0
Water Based Versions Milky White

VOC, EPA Test Method 24

RA #10 <250 g/l
RA #10 IP <750 g/l
RA #10 E <250 g/l

PACKAGING

Packaged in 5 gal (19 l) pails (RA #10 and RA #10 IP), 5.28 gal (20 l) bag-in-a-box (RA #10 E), 55 gal (208 l) drums and 275 gal (1,041 l) totes.

SHELF LIFE

Shelf life is one year. Use before the "USE BY" date stated on product packaging.

HANDLING/STORAGE

Store in a dry location within a temperature range between 40° F (4° C) and 100° F (38° C).

AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, NOX-CRETE Products Group maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, phone (800) 669-2738 or (402) 341-1976.

LIMITED WARRANTY

NOTICE-READ CAREFULLY

CONDITIONS OF SALE

NOX-CRETE offers this product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and limited warranty which may only be varied by written agreement of a duly authorized corporate officer of NOX-CRETE. No other representative of or for NOX-CRETE is authorized to grant any warranty or to waive limitation of liability set forth below.

WARRANTY LIMITATION

NOX-CRETE warrants this product to be free of manufacturing defects. If the product when purchased was defective and was within use period indicated on container or carton, when used, NOX-CRETE will replace the defective product with new product without charge to the purchaser.

NOX-CRETE makes NO OTHER WARRANTY, either express or implied, concerning this product. There is NO WARRANTY OF MERCHANTABILITY. In no case shall NOX-CRETE be liable for special, indirect or consequential damages resulting from the use or handling of the product and no claim of any kind shall be greater in amount than the purchase price of the product in respect of which damages are claimed.

INHERENT RISKS

NOX-CRETE MAKES NO WARRANTY WITH RESPECT TO THE PERFORMANCE OF THE PRODUCT AFTER IT IS APPLIED BY THE PURCHASER, AND PURCHASER ASSUMES ALL RISKS ASSOCIATED WITH THE USE OR APPLICATION OF THE PRODUCT.