

## PRO-RELEASE PLUS

Chemically active, multi-purpose, water based concrete form release agent.

VOLATILE ORGANIC COMPOUND (VOC) REGULATORY COMPLIANCE

USEPA CARB-SCM SCAQMD LADCO, OTC UT-R307, CO MCAQMD CT, MD, DE, D.C. CANADA

PRO-RELEASE PLUS

PRO-RELEASE PLUS WINTER GUARD AND CONCENTRATE



### HOW IT WORKS

PRO-RELEASE PLUS is an economical, water based, general purpose concrete form release agent that combines both chemically active and barrier-type components for improved performance with most concrete mix designs, including mix designs incorporating pozzolans such as fly ash or blast furnace slag.

### APPLICATIONS

- ◆ Use on steel and fiberglass in precast applications, low-cost overlaid import plywood, curb and gutter forms, plastic and plywood faced handset forms.
- ◆ Use in commercial and residential concrete forming applications.

### ADVANTAGES

- ◆ Economical alternative to higher cost specialty type form release agents where cost per gallon considerations outweigh performance requirements.
- ◆ Chemical and barrier components provide improved release for most concrete mix designs, including mixes containing pozzolans such as fly ash or blast furnace slag.
- ◆ Dries fast and is not slippery.
- ◆ Resists removal by normal rain showers.
- ◆ Low odor, nonflammable, water based formulation is safe to use and meets all federal and state VOC requirements.
- ◆ Green Engineered™ – better for health and the environment.
- ◆ Available with Winter Guard™ additive for cold weather application and storage. With Winter Guard,™ PRO-RELEASE PLUS can be safely applied at temperatures above 25° F (-4° C) and can be stored at temperatures below 25° F (-4° C) without damaging the emulsion.
- ◆ Available as PRO-RELEASE PLUS CONCENTRATE which can be easily diluted with water, kerosene or fuel oil and provides excellent emulsion stability. When mixed with water, PRO-RELEASE PLUS CONCENTRATE components stay mixed longer.
- ◆ Variable dilution rate allows user the freedom to maximize PRO-RELEASE PLUS CONCENTRATE performance depending on concrete mix design, stripping schedule and weather conditions by simply adjusting the dilution mix ratio.
- ◆ PRO-RELEASE PLUS CONCENTRATE can also be used as a form maintenance coating to soften concrete buildup on forms by simply reducing the dilution ratio.
- ◆ PRO-RELEASE PLUS CONCENTRATE will not freeze unless diluted with water.

### ▲ 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 affects on the form or the concrete and should not be confused with buildup.
- ◆ Not recommended where forms are to be removed in less than 12 hours, unless artificial heat or accelerating admixtures are used to hasten development of concrete surface strength.
- ◆ Protect PRO-RELEASE PLUS 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. PRO-RELEASE PLUS CONCENTRATE will not freeze unless diluted with water. If diluted with water and allowed to freeze, product may separate, rendering it unsuitable for use. PRO-RELEASE PLUS with Winter Guard™ can be successfully applied at temperatures as low as 25° F (-4° C) and can be stored at temperatures below 25° F (-4° C) without damaging the emulsion. Product must be 25° F (-4° C) or more before use. Do not store at temperatures below -10° F (-23° C).
- ◆ Do not apply PRO-RELEASE PLUS if temperature is at or below 32° F (0° C). Applications of PRO-RELEASE PLUS that have dried are not affected by freezing temperatures. For application in temperatures as low as 25° F (-4° C), use PRO-RELEASE PLUS with Winter Guard.™
- ◆ Allow applied product to dry thoroughly before coming into contact with rain or wet concrete. Dry time will vary based on ambient temperature and humidity conditions. Reapply product if treated form surface is exposed to rain prior to drying.
- ◆ Diluting PRO-RELEASE PLUS CONCENTRATE with a petroleum distillate such as kerosene or fuel oil may result in exceeding federal or state VOC regulations. Contact Nox-Crete for specific information concerning your application.
- ◆ Generally not recommended for use in architectural concrete forming applications without verifying performance and concrete appearance with a field-scale mock-up.

### USE INSTRUCTIONS

- ◆ Request current product literature, labels and safety data sheets from manufacturer and read thoroughly before product use.
- ◆ Site environmental conditions, concrete mix designs, substrate conditions and construction have a major effect on product selection, application methods, procedures

PRO-RELEASE PLUS

Form Release Agents



chemical solutions to concrete problems

and rates, appearance and performance. Product literature provides general information applicable to some conditions. However, an adequate site 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.

- ◆ The typical application rate is 600-800 sf / gal (15 - 20 sm / L) depending upon substrate. Conduct a test application to verify the proper application rate for your use.
- ◆ PRO-RELEASE PLUS CONCENTRATE must be diluted prior to use. Product may be diluted with water, kerosene or fuel oil (see Precautions). Typical dilution rate is one part PRO-RELEASE PLUS CONCENTRATE to six parts diluent. For use as a maintenance coating, dilute one part PRO-RELEASE PLUS CONCENTRATE to three parts water or other diluent.
- ◆ To simplify dilution of PRO-RELEASE PLUS CONCENTRATE with water, use Nox-Crete's MIX STATION which provides accurate, dependable and economical dilution and mixing performance. Comes equipped with mixing plugs to accommodate varying product temperature conditions - see chart at the end of the document.
- ◆ PRO-RELEASE PLUS is best applied using a low pressure sprayer. For hand pump spray applications, use Nox-Crete's PERFECT FORM & CONCRETE SPRAYER or the more economical IDEAL FORM & CONCRETE SPRAYER. Obtain best results by applying a uniform application of PRO-RELEASE PLUS immediately following form stripping. Allow coated form surfaces to dry prior to placing concrete.
- ◆ Avoid over application and remove excess material, runs and puddles with rags.
- ◆ Prevent material overspray from contacting reinforcing steel and/or tensioning cables.
- ◆ Application equipment and overspray can be cleaned with detergent and water.

## TECHNICAL DATA

Physical Properties	PRO-RELEASE PLUS	PRO-RELEASE PLUS Winter Guard	PRO-RELEASE PLUS Concentrate
Bulk Density	8.1 lbs./gal. (0.98 kg/L)	8.2 lbs./gal. (0.97 kg/L)	7.7 lbs./gal. (0.92 kg/L)
Flash Point	>200°F (>93° C)	>200°F (>93° C)	>200°F (>93° C)
Odor	Pleasant	Pleasant	Pleasant
VOC	<100 g/L	<400 g/L	<50 g/L

## PACKAGING

PRO-RELEASE PLUS is packaged in 5 gal (19 L) pails and 55 gal (208 L) drums. PRO-RELEASE PLUS CONCENTRATE is packaged in 1 gal. (3.8 L), 5 gal (19 L) and 55 gal (208 L) containers 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

PRO-RELEASE PLUS (without Winter Guard™) should be stored in a dry location within a temperature range of 40° F (4° C) and 100° F (38° C). PRO-RELEASE PLUS with Winter Guard™ can withstand storage under freezing conditions. Store PRO-RELEASE PLUS CONCENTRATE in a dry area away from heat, sparks and open flame. If diluted with water, protect from freezing.

## AVAILABILITY & TECHNICAL SERVICES

In addition to corporate offices in Omaha, Nebraska, Nox-Crete Inc. maintains regional offices and distribution centers in principal markets throughout the world. For source or technical information, call 800-669-2738 or 402-341-2080.

## 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.

### MIX STATION PLUG CHART FOR PRO-RELEASE PLUS CONCENTRATE

To ensure proper dilution ratio, select the proper mixing plug based on the actual product temperature. Product temperature and ambient temperature are not necessarily the same.

#### Release Agent Use

6:1 Recommended Dilution Ratio

Plug #	Product Temperature
6	40° F (4.4° C) - 45° F (7.2° C)
5	45° F (7.2° C) - 52° F (11° C)
4	52° F (11° C) - 59° F (15° C)
3	59° F (15° C) - 85° F (29.4° C)

#### Maintenance Coat Use

3:1 Recommended Dilution Ratio

Plug #	Product Temperature
Remove Plug	50° F (10° C) - 65° F (18.3° C)
6	65° F (18.3° C) - 85° F (29.4° C)