



BIO-NOX

Biodegradable, water based, maximum performance concrete form release agent.

HOW IT WORKS

BIO-NOX chemically reacts with concrete to produce a slippery soap-like film that positively prevents bonding of concrete to form surfaces.

APPLICATIONS

- ◆ Use on most smooth, clean form surfaces such as steel, HDO, MDO, plastic, fiberglass and also on bare plywood and plywood faced handset forms.
- ◆ Use on many rubber and closed cell foam forms and form liners that cannot tolerate conventional solvent, or petroleum based release agents.
- ◆ Ideal for use where environmental and occupational issues are of the utmost importance, such as enclosed precast operations or enclosed building sites.

ADVANTAGES

- ◆ 100% biodegradable formulation.
- ◆ Free from conventional form oil, diesel oil or kerosene.
- ◆ Provides smooth, uniform concrete surfaces with no staining and minimal surface voids.
- ◆ Crisp, positive release.
- ◆ Reduces form cleaning and maintenance costs -- forms become self-cleaning with continued use.
- ◆ Contains a corrosion inhibitor designed to prevent flash rusting.
- ◆ Reduces likelihood of skin or odor irritations that can occur with petroleum based release agents.
- ◆ Concrete surfaces are free of residue and the natural bonding characteristics of paints, plasters, mortars, epoxies and other surface coatings are not affected when BIO-NOX is properly applied.
- ◆ Can be used in most situations where forms are stripped and repoured within 24 hours.
- ◆ Can be successfully applied to damp form surfaces.
- ◆ Less sensitive to application rate variations than other chemically active form release agents.
- ◆ Fast drying formulation allows early bed traffic and stringing of reinforcing strands.
- ◆ Green Engineered™ – better for health and the environment.

- ◆ Meets all federal and state VOC requirements. Also meets all known Occupational Safety and Health (OSHA) regulations and Environmental Protection Agency (EPA) requirements for biodegradability.

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.
- ◆ Do not use on concrete or plaster molds unless they are adequately sealed with a suitable chemically resistant sealer or coating prior to application.
- ◆ Requires reapplication if concrete has not been placed within 21 days following the initial application.
- ◆ Protect 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.
- ◆ Do not apply if temperature is at or below 32° F (0° C). However, freezing temperatures do not affect product performance after applied product has dried.

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 construction 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 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

BIO-NOX

Form Release Agents



chemical solutions to concrete problems

product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.

- ◆ Apply at air and substrate (form) temperatures above 32° F (0° C).
- ◆ Application rates necessary to optimize performance vary with the form surface condition, porosity, concrete buildup (if any), concrete composition, concrete curing time and temperatures.
- ◆ Typical application rate on clean, smooth steel or dense plastic forms is 2000-2500 sf/gal. (50-60 sm/l). Typical application rate on raw (not overlaid or resin-coated) plywood is 800-1000 sf/gal (20-25 sm/l).
- ◆ Mix well before use with NOX-CRETE's drum or pail agitator or other suitable mixing apparatus before use. Always remix prior to each withdrawal from container and immediately prior to each use.
- ◆ Can be applied by all conventional methods, but spray application with a low pressure sprayer like NOX-CRETE's PERFECT FORM AND CONCRETE SPRAYER or PERFECT POWER SPRAYER is recommended. Use tip 8001 LP supplied with NOX-CRETE sprayers.
- ◆ Apply to clean, reasonably dry forms. Use care to prevent contact with reinforcing steel.
- ◆ Avoid puddles, runs and excessive spray drift.
- ◆ Promptly wipe up material excesses with towels.
- ◆ Promptly clean all form surfaces following stripping. Then reapply BIO-NOX.
- ◆ Clean application equipment with soap and water immediately following use.

TECHNICAL DATA

ColorMilky White
Clarity Opaque
Bulk Density8.1 lbs./gal. (97 g/l)
Freeze Point 32° F (0° C)
Flash Point >200° F (93° C)
VOC < 100 g/l
VP< 16.0 mmHg @ 20° C

PACKAGING

Packaged in 5.28 gal (20 l) bag-in-a-box, 55 gal (208 l) drums and 275 gal (1,041 l) bulk tanks.

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 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.