## nox-cret<sup>™</sup>e

chemical solutions to concrete problems

# FORMING





## FORM MEETS FUNCTION

We have taken forming to a new level by introducing an entire line of high-performance form release agents specifically designed to handle the most aggressive concrete mix designs, while still providing maximum form life.

Whether your project calls for a biodegradable architectural form release agent or a more general, economical release agent, Nox-Crete has you covered with maximum-performance products.

The result? A smooth, uniform, bughole-free architectural surface appearance that costs less to achieve – saving you time and money.

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### Customer Support (402) 341-2080

## FORMING

### GENERAL PURPOSE FORM RELEASE AGENTS

#### FOAM RELEASE

#### Water Based

#### Form Release Agent

Foam Release is a thickened combination chemically active and physical barrier-type release agent, which positively prevents concrete sticking, substantially reducing form-stripping time. Used on expanded polystyrene (EPS), extruded polystyrene, polyurethane and polyisocyanurate form surfaces, knockouts and void formers to minimize form sticking. A bright colored, pH-sensitive pink dye is added to ensure uniform coverage. Complies with all federal and state VOC requirements.

#### **NOX-CRETE FORM COATING**

Petroleum Based • Water Based

#### Maximum-Performance Form Release Agent

The world's first chemically active, petroleum-based form release agent. Unparalleled performance on most absorptive form surfaces. Extends the useful form life on all non-overlaid plywood forms, medium density overlaid (MDO) plywood forms, high density overlaid (HDO) plywood forms, dimensional lumber and steel forms. Improves concrete surface appearance with no staining and reduced surface void defects (bugholes). Available in an EPA Readily Biodegradable version that complies with OECD 301 and multiple other versions to meet all federal, state and local VOC requirements.



**NOX-CRETE FORM COATING** 

#### **BIO-NOX**

#### • Petroleum Based • Water Based Maximum-Performance, Readily Biodegradable Form Release Agent

Bio-Nox contains chemically active vegetable fatty acids that are EPA Readily Biodegradable – complies with OECD 301. Produces architectural concrete surfaces free of staining with reduced surface void defects (bugholes). Unparalleled performance on most non-absorptive form surfaces. Ideal for use on all rubber, plastic or fiberglass forms and form liners. Also for use on all forming substrates sensitive to petroleumbased solvent attack. Complies with all federal, state and local VOC requirements. Available in water-based and petroleum solvent-based versions.

#### **RELEASE AGENT #10**

#### • Petroleum Based Maximum-Performance Architectural Form Release Agent

The low viscosity of Release Agent #10 allows it to be easily applied with low-pressure sprayers to produce architectural concrete surfaces free of staining with reduced surface void defects (bugholes). Ideal for form applications requiring an ultra-thin film, chemically active release agent that is both fast drying and less slippery in horizontal deck applications. Available in an EPA Inherently Biodegradable version that complies with OECD 301 and multiple other versions to meet all federal, state and local VOC requirements.



**RELEASE AGENT #10** 



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## ALUMINUM FORM RELEASE AGENTS

#### **ALUMI-NOX R**

#### • Petroleum Based Maximum-Performance Form Release Agent for Aluminum Forms

Produces superior concrete surfaces free of staining and surface voids. Minimizes form sticking and concrete buildup on form surfaces and panel edges. Performs well with concrete mix designs that use chemical and mineral admixtures, such as fly ash and blast furnace slag. Chemically active – cleans forms through use. Also available in multiple versions to meet all federal, state and most local VOC requirements.

#### **ALUMI-CON**

#### • Super Concentrated • Water Dilutable Economical, Super-Concentrated Form Release Agent for Aluminum Forms

Chemically active economical alternative to petroleum-based form release agents. Dilutes easily (up to 1:6) with water using Nox-Crete's Mix Station (not required). Variable dilution rate allows user to maximize product performance and economy. Improved emulsion technology ensures that product stays mixed and has good rain resistance once dry. Does not leave an oily residue on the form surface and has almost no odor. Complies with all federal, state and local VOC requirements.

## ECONOMICAL FORM RELEASE AGENTS

#### **CHEMBETON**

#### Petroleum Based

#### **Economical Form Release Agent**

Combines both chemically active and barrier components in a petroleum-based formulation. Fast drying. Resists removal by normal rain showers. For use on most absorptive and nonabsorptive form surfaces. Complies with all federal and state and most local VOC requirements.

#### **QUICK RELEASE**

#### • Petroleum Based

#### **Economical Form Release Agent**

Combines both chemically active and barrier components resulting in a value engineered product designed to meet competitive market conditions. Combines good sprayability, low odor and the performance you expect from Nox-Crete. Complies with all federal and state and most local VOC requirements.



PRO-RELEASE

#### **PRO-RELEASE**

#### • Water Based

#### **Economical Form Release Agent**

Low-odor, chemically active, ready-to-use product incorporates improved emulsion technology to keep product mixed. Specifically formulated for today's concrete mix designs that incorporate fly ash. Contains no diesel fuel or kerosene. For use on most absorptive and non-absorptive form surfaces. Available in a nonfreezable version containing Winterguard. Complies with all federal, state and local VOC requirements.



**ALUMI-CON** 

## WOOD FORM SEALERS & EDGE SEALANT

#### **CLEAR PRE-FORM**

#### • Low Build Transparent, Penetrating, Moisture Cure Polyurethane Wood Sealer

Extends the life of plywood forms by reducing the absorption of alkaline bleed water. Improves concrete surface appearance by preventing soluble wood sugar migration, which can cause concrete surface retardation. Ideal for use with dimensional lumber, plywood, waferwood, oriented strand board (OSB), medium density fiberboard (MDF) and particle board concrete forms and rustication strips. Complies with all federal and state and most local VOC requirements.

#### **EDGE-FLEX 645**

#### Tough, Flexible, Plywood Edge Sealer and Lumber End Sealer

Extends concrete forming panel life and reduces edge swell by reducing the absorption of alkaline bleed water through field-cut panel edges. Ideal for use with all types of plywood, waferwood and oriented strand board (OSB) concrete forming panels.



**EDGE-FLEX 645** 

#### **PRE-FORM HB**

#### • High Build Flexible Polyurethane Coating System

Used to overlay or resurface plywood forms in exterior applications. Creates uniformly smooth surfaces by covering up all imperfections, rough surfaces and screw holes. Prevents wood grain pattern telegraphing of plywood forms onto formed concrete surfaces. Ideal for use on plywood form tables and in plywood gang-form applications.



**PRE-FORM HB** 



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## FORM MAINTENANCE PRODUCTS

#### FORM CLEAN

#### • Petroleum Based Dual Purpose Form Cleaner and Form Release Agent

Available in petroleum- and water-based formulations. Removes hardened concrete buildup through repeated use while forms are in service, while also acting as a release agent with no loss of down time. Cost-effective alternative to abrasive blasting, acid washing and scraping and will not damage form surfaces. Extremely effective on aluminum and steel forms.

#### **BLAST-OFF**

#### • Water Based Fast-Acting, Non-Corrosive Biodegradable Concrete Remover

Fast-acting organic acid derived from sugar beets; contains no mineral-based acids. Quickly removes cement and concrete buildup on concrete forms, mixers, pumps, paving machines, screeds, saws, tools and more. Non-corrosive to equipment and is biodegradable. Does not remove aluminum form seasoning when used to eliminate buildup on aluminum forms.

#### **SEASONOX**

#### • Water Based Seasoning Compound for Stamped Aluminum Forms

Minimizes the natural reactivity between aluminum and fresh concrete by creating a protective barrier that reduces form buildup and sticking. Use on new aluminum forms or used forms that have lost their seasoning due to being acid cleaned, abrasive-blasted or high-pressure washed. A version is also available for use on extruded aluminum form surfaces.

### FORMGARD TJ PLUS

#### • Petroleum Based High-Performance, Specialized Rust Inhibitor for Steel Forms

Protects steel forms in storage from rusting for up to six months. Also performs as a form release agent and does not require costly removal prior to form use.

#### **KEM-EX-IT PLUS**

#### • Water Based

#### **Rust and Concrete Buildup Remover**

Ready to use without dilution or mixing. Ideal for quickly removing flash rust or light rust on steel forms and avoiding form surface damage caused by sandblasters and other harsh cleaning methods.

#### FOUR-ACT

#### Petroleum Based

#### Highly chemically reactive, 4-in-1 form cleaner, buildup and splatter remover, release agent and seasoning compound.

FOUR-ACT is a concentrated, petroleum-based, highly reactive formulation that chemically reacts with fresh concrete to prevent bonding and with existing concrete to soften buildup on all types of concrete handling and placing equipment and aluminum forms. FOUR-ACT can also be used in combination with SEASONOX to help season aluminum forms and can be diluted for use as a form release agent.



## **APPLICATION EQUIPMENT**



#### PUMP FOAMER Hand Pump Foamer

A heavy-duty polypropylene tank and gun specifically designed for application of Blast-Off and Kem-Ex-It Plus to produce a rich foam that clings to vertical surfaces. Equipped with a wide mouth and funnel cap for easy filling, Viton<sup>®</sup> seals for extended durability and a built-in pressure relief valve. When used properly, the Pump Foamer maximizes performance of Blast-Off concrete buildup and splatter remover and Kem-Ex-It Plus rust and concrete buildup remover.

#### IDEAL FORM & CONCRETE SPRAYER Economical Hand Pump Sprayer

The Ideal Form & Concrete Sprayer is an economical choice for applying concrete form release agents, tilt-up bondbreakers, curing compounds, floor sealers and other construction chemicals. Equipped with a polypropylene tank and trigger valve, brass wand and chemical-resistant hose, seals and gaskets. Includes discharge filter in the tank and an eight-foot coiled hose.



#### **EXCEL 130 CONCRETE FORM SPRAYER**

#### Heavy-Duty, Compressed Air-Filled Concrete Form Release Agent Sprayer

High-pressure concrete form release agent sprayer that can be filled with compressed air up to 130 psi (896 kPa). Uses Constant Flow (CF) valves to regulate spray tip pressures to 60 psi (414 kPa) or 40 psi (276 kPa), depending on pressure required to achieve a uniform spray pattern. Comes equipped with a high-capacity in-line 100mesh filter, heavy-duty stainless steel tank, trigger valve, wand, chemically resistant seals and gaskets.



#### PERFECT FORM & CONCRETE SPRAYER

#### **Contractor-Grade Hand Pump and Compressed Air-Filled Sprayer**

Perfectly designed for applying concrete form release agents and other construction chemicals. Can be hand pumped or charged from an external air source to a maximum pressure of 116 psi (800 kPa). Uses Constant Flow (CF) valves to regulate spray tip pressures to 60 psi (414 kPa) or 40 psi (276 kPa), depending on pressure required to achieve a uniform spray pattern. Equipped with a heavy-duty stainless steel tank, brass wand and trigger valve, high- capacity in-line 100-mesh filter, air pressure gauge, spare parts container and chemically resistant hose, seals and gaskets.

## FORMING

### **HISTORY**



**CARL LINN IN THE LABORATORY** 

#### THE CONCRETE CHALLENGE

In 1956, while working for a lubricant company, chemist Carl Linn observed contractors using the company's oil and grease compounds to prevent concrete from bonding to forms. Not only were the compounds difficult to work with, but the concrete was discolored and unpaintable. Forms failed after just a few pours. Concrete workers struggled with these issues for years, but Linn had an idea.

#### **OUR CHEMICAL SOLUTIONS**

Carl developed a chemically active release agent, Nox-Crete Form Coating, and a chemically active form maintenance product, Deactivator. With Nox-Crete Form Coating, contractors produced considerably better looking concrete and got longer life from their wood forms.

With Deactivator, concrete buildup was safely and easily removed from tools and equipment. And so, Nox-Crete's passion for solving concrete professionals' challenges was born.









chemical solutions to concrete problems



#### **DEACTIVATOR • FORM COATING**

#### STILL INNOVATING WORLDWIDE

Today, Nox-Crete continues to manufacture chemical solutions to concrete problems. While still manufacturing the original Nox-Crete Form Coating and Deactivator, we have expanded our product line to include over 100 different products spanning six different market segments that are sold through a worldwide network of distributors and dealers.

Following Carl Linn's example, we continue to rely on concrete contractors for new product ideas. Our chemists and engineers examine field problems and develop solutions in our laboratory.

This passion for innovation is found in the quality, performance and results of all Nox-Crete products.

#### CONCRETE MARKETS WE SERVE

- Application Equipment
- Curing
- Decorative
- Grouts and Repair • Equipment Maintenance

Flooring

Forming

- Mortars
- Plywood form OEM
- Precast
- Tilt-Up
- Waterproofing



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