# nox-cret<sup>®</sup>e

# **FORMING**

chemical solutions to concrete problems



# FORM MEETS FUNCTION

We have taken forming to the highest level. Our form release agents have been uniquely formulated for use on most form surfaces and with the most challenging concrete mix designs.

In addition, we offer a large variety of supplemental products for the protection and maintenance of your forming equipment and also for the application of all Nox-Crete forming related products.



### WE ARE THE LEADING INDUSTRY EXPERTS!

# THE ORIGINATORS OF THE WORLD'S FIRST CHEMICALLY ACTIVE FORM RELEASE AGENT



Nox-Crete
has you Covered for ALL
your Concrete Forming Needs!

### **PRODUCTS FOR WOOD FORMS**

- Chemically Active Release Agents that maximize plywood panel reuses
- Wood Form Sealers that stop wood sugar migration and related dusting
- Plywood Edge Sealers that stop edge swelling and prevent early deterioration

# PRODUCTS FOR ALUMINUM AND STEEL FORMS

- Seasoning Compounds for aluminum forms designed to minimize the reaction between aluminum and concrete reducing form gassing, concrete build-up on form surfaces and concrete surface retardation
- Specialized Chemically Active Release Agents for aluminum forms designed to minimize concrete build-up
- Specialized Release Agents with built-in rust inhibitors to prevent steel form flash rusting between concrete pours
- Rust Inhibitor designed to protect steel forms and equipment for up to six-months of exterior exposure
- Rust Remover that eliminates the need for media blasting or grinding
- Concrete Build-up Remover that will not damage or corrode metal surfaces and is safer for user health and environment

#### SPECIALTY PRODUCTS

- Ultra Low VOC water-based and oil-based Release Agent formulations
- Biodegradable Water-based and Oil Based Form Release Agents
- Reactive Release Agents for polystyrene and polyurethane forms and formliners
- Non-Slip Release Agents designed for use on non-absorptive form surfaces used in horizontal forming applications
- High Performance Application Equipment

PRODUCTS	PAGE
ECONOMICAL RELEASE AGENTS	4
MAXIMUM PERFORMANCE RELEASE AGENTS	5
ALUMINUM FORM RELEASE AGENTS	6
ALUMINUM FORM MAINTENANCE & PROTECT	<b>TION</b> 7
FORM & EQUIPMENT MAINTENANCE PROTEC	TION8
WOOD FORM SEALERS & EDGE SEALANT	9
APPLICATION EQUIPMENT	10
IMPROPER APPLICATION VS PROPER APPLICA	<b>ATION</b> 11
NOX-CRETE HISTORY	12



### **GREEN ENGINEERED PRODUCTS**

Since the early 1980s, Nox-Crete has been committed to developing products that are Green Engineered®. Nox-Crete products with this label are specially designed to be safer for both people and the environment. The cornerstone of our Green Engineered® concept is our research and development of water-based products. Green Engineered® products from

Nox-Crete are performance-driven and designed to the highest quality standards using the safest raw materials. With Green Engineered® products, design and construction professionals can meet the expectations for project design and construction without compromise to product performance or the world we share.







### **ECONOMICAL RELEASE AGENTS**

#### **PRO-RELEASE 3.0**

#### Water Based

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

A revolutionary 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. Used as an alternative to higher cost specialty type form release agents where cost per gallon considerations outweigh performance requirements.





**PRO-RELEASE 3.0** 

#### **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.



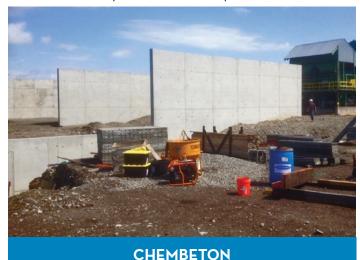
**QUICK RELEASE** 

#### **CHEMBETON**

#### Petroleum Based

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

Combines both chemically active and barrier components in a petroleum-based formulation. Good cold weather sprayability and fast drying. Resists removal by normal rain showers. For use on most absorptive and non-absorptive form surfaces.





### MAXIMUM PERFORMANCE RELEASE AGENTS

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

#### Petroleum Based Water Based

# Green

## 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.\*



**RELEASE AGENT #10** 

#### **BIO-NOX**



## Maximum-Performance, Readily Biodegradable Form Release Agent

Bio-Nox contains chemically active and barrier components that are classified by the United States Environmental Agency (EPA) as readily biodegradable and 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. Can be used on all rubber, plastic or fiberglass forms and form liners to include all form surfaces sensitive to petroleum based solvent attack. \*\*



\* Complies with all federal and state and most local VOC requirements.

#### NOX-CRETE FORM COATING

Petroleum Based
 Water Based

# Green

#### **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 of all non-overlaid plywood forms as well as medium density overlaid (MDO) and high density overlaid (HDO) plywood forms. Can also be used on steel form surfaces. Improves concrete surface appearance with no staining and reduced surface void defects (bugholes). \*\*



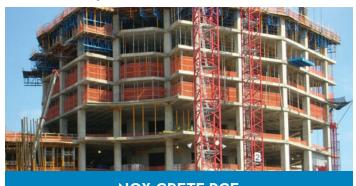
**NOX-CRETE FORM COATING** 

#### **NOX-CRETE PCE**



#### **Biodegradable Architectural Form Release Agent**

Nox-Crete PCE is a high quality, water-based form release agent ideal for architectural concrete. Once it dries, it forms a non-slip, transparent, wax-like film which is resistant to foot traffic as well as rain showers and dew. When Nox-Crete PCE comes into contact with cement, it chemically reacts to form a soapy film that allows trapped air and free water to escape during vibration. As a result, when applied properly, the product produces uniformly colored architectural concrete surfaces with substantially fewer surface voids.



NOX-CRETE PCE

### **ALUMINUM FORM RELEASE AGENTS**



#### **ALUMI-CON**

#### 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 for everyday use on clean aluminum forms and dilutes 1:3 for use on aluminum forms with concrete buildup. 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 and state and most local VOC requirements.

#### **ALUMI-NOX**

#### Petroleum Based Water Based

# Maximum-Performance Form Release Agent for Aluminum Forms

A chemically active form release agent that keeps aluminum forms clean and free of concrete build-up. Produces superior concrete surfaces free of staining and surface voids. Performs well with concrete mix designs that use chemical and mineral admixtures, such as high-range water reducers, fly ash and blast furnace slag.  $\star$ 



+ Complies with all federal, state and local VOC requirements.

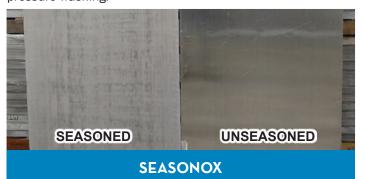
### **ALUMINUM FORM MAINTENANCE & PROTECTION**

#### **SEASONOX**

#### Water Based

#### **Designed Specifically as a Seasoning Compound for Cold-Rolled, Stamped or Cast Aluminum Forms**

Seasonox is a fast-acting biodegradable and VOC compliant alternative to lime conditioning that 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 existing forms that have lost their seasoning due to acid cleaning, media blasting or highpressure washing.



#### SEASONOX EXT



### **Seasoning Compound for Extruded Aluminum Forms**

Designed specifically as a seasoning compound for extruded aluminum forms. Seasonox EXT is an ideal alternative to powder-coating. Water-based and ready-to-use, Seasonox EXT chemically changes the surfaces of new extruded aluminum forms and greatly reduces the chemical bonding (sticking) that can take place between extruded aluminum and fresh concrete.



#### **FORM CLEAN**

#### Petroleum Based

#### **Dual Purpose Form Cleaner and Form Release Agent**

Removes hardened concrete buildup through repeated use while forms remain in service. Also, functions as a release agent which eliminates the need for the application of a second product prior to each pour. Cost-effective alternative to media blasting, acid washing, pressure washing and scraping and will not damage the form surfaces. Extremely effective on aluminum and steel forms.



FORM CLEAN

#### **FOUR-ACT**

#### Petroleum Based

#### Highly Chemically Active, 4-in-1 Form Cleaner, Buildup and Splatter Remover, Release Agent and Seasoning Compound

Four-Act is a concentrated, petroleum-based, highly chemically active formulation that requires dilution before use. The product chemically reacts with fresh concrete to prevent bonding to existing concrete buildup on form surfaces. It also softens build-up on concrete handling and placing equipment as well as aluminum and steel forms. Four-Act can be used in combination with Seasonox to help season aluminum forms. Four-Act can also be added to certain Nox-Crete release agents to increase reactivity.





### FORM & EQUIPMENT MAINTENANCE PROTECTION

#### **BLAST-OFF®**

Water Based

# Fast-Acting, Non-Corrosive Biodegradable Concrete Remover

Highly effective 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. Will not remove aluminum form seasoning when used to eliminate buildup on aluminum forms.



#### DEACTIVATOR

#### Petroleum Based

# The Original, Chemically Active Concrete Equipment Cleaning and Maintenance Coating

**BLAST-OFF®** 

Deactivator chemically reacts with the alkalies in the concrete to prevent fresh concrete from bonding and gradually soften existing concrete buildup. When applied to mixers, conveyors, pumps and other types of concrete handling equipment, Deactivator prevents the adhesion and accumulation of concrete buildup. Complies with all federal, state and local VOC requirements.



#### **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 media blasting and other harsh cleaning methods.



#### **FORM ARMOR**

#### Petroleum Based

### High-Performance, Specialized Rust Inhibitor for Steel Forms

Protects steel forms from the corrosive effects of rain and salt water mist for up to six months in exterior exposure conditions.



### **WOOD FORM SEALERS & EDGE SEALANT**

#### CLEAR PRE-FORM®

#### Solvent Based

#### Low Build, Transparent, 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 lead to concrete surface dusting. Ideal for use with dimensional lumber, non-overlaid plywood, waferwood, oriented strand board (OSB), medium density fiberboard (MDF) and particle board concrete forms and rustication strips.



#### PRE-FORM® HB

#### • 100% Solids

#### 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.





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

#### Water Based

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

Edge-Flex 645 is a maximum performance plywood edge sealer that extends concrete form panel life and reduces edge swell by reducing the absorption of alkaline bleed water through field-cut panel edges.





### THE EVOLUTION OF THE PERFECT FORM SPRAYERS

Nox-Crete has been PERFECTING proper application for over 60 years!









1974





Ist Generation
Perfect From
prayer is Released

1959

2nd Generation Perfect Form Sprayer Released

1967

3rd Generation Perfect Form Sprayer Released

1972

4th Generation Perfect Form Sprayer Released

5th Generation Perfect Form & Concrete Sprayer

2010

6th Generation Newly Released in 2022

### **APPLICATION EQUIPMENT**



#### PERFECT FORM SPRAYER

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

Perfectly designed for applying Nox-Crete form release agents. Can be charged to a maximum pressure of 87 psi (600 kPa) by hand pumping or from an external air source when equipped with optional air compressor fill valve. Utilizes a heavy-duty stainless steel tank, stainless steel wand, pistol grip shut-off, high-capacity in-line 100-mesh filter, air pressure gauge, and cold weather compatible, chemically resistant hose, seals and gaskets.

#### PERFECT PUMP FOAMER

#### **Hand Pump Foamer**

The Perfect Pump Foamer is specifically designed to produce a thick, rich foam that clings to vertical surfaces. It is manufactured with a heavy-duty polypropylene tank and equipped with a wide mouth and funnel cap for easy filling without contamination. Can be charged to a maximum pressure of 58 psi (400 kPa) by hand pump or from external air source through the supplied air compressor fill valve. Chemical resistant hose, seals and gaskets for extended durability and a built-in pressure relief valve. When used properly, the Perfect Pump Foamer will maximize the performance of Blast-Off concrete buildup and splatter remover.

# IMPROPER APPLICATION VS PROPER APPLICATION



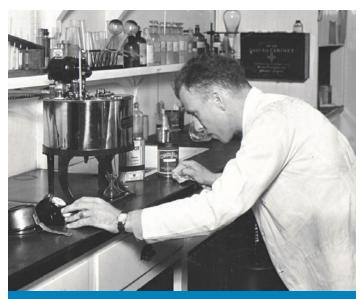
#### PERFECT FORM SPRAYER

The success of a project often depends on proper application. The Perfect Form Sprayer helps ensure smooth, consistent application through pressure regulation and use of a constant flow valve which allows maximum performance for all Nox-Crete release agents in warm or cold weather



# **FORMING**

### **HISTORY**



**CARL LINN IN THE LABORATORY** 



**DEACTIVATOR • FORM COATING** 

#### 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 the first 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.

#### 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
  - Flooring
- Plywood form OEM

- Curing
- Forming
- Precast

- Decorative
- · Grouts and Repair
- Tilt-Up

- Equipment Maintenance

- **Mortars** 
  - Waterproofing











