Green UTILITY RELEASE

Super concentrated, chemically active, water based, general purpose concrete form release agent.

HOW IT WORKS

UTILITY RELEASE is an economical, super concentrated concrete form release agent that chemically reacts with the alkalies in concrete to form a slippery soap film that prevents form sticking and concrete buildup on form surfaces.

- APPLICATIONS

- Use on bare plywood 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.
- Chemically active.
- Dries fast and is not slippery.
- Resists removal by normal rain showers.
- Easily diluted and stays mixed well.
- Can be diluted with water, kerosene or fuel oil.
- Variable dilution rate allows user the freedom to maximize product performance on many different forming substrates by simply adjusting the diluent mix ratio.
- Performs well on plywood and steel form surfaces.
- Reduces form maintenance costs by reducing concrete buildup.
- Can also be used as a form maintenance coating to soften concrete buildup on forms and equipment by simply reducing the dilution ratio.
- Will not freeze unless diluted with water.
- Low odor does not contain fuel oil.
- Nonflammable.
- Green Engineered[™] better for health and the environment.
- Meets all federal and state VOC requirements.

· A PRECAUTIONS A

 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 is used to hasten concrete cure.
- UTILITY RELEASE is not freezable unless diluted with water. If diluted with water and allowed to freeze, product may be rendered unsuitable for use.
- Do not use in the manufacture of architectural concrete without prior approval of a field-scale mock-up.
- Protect coated form surfaces from rain for a minimum of 2 hours or until UTILITY RELEASE has dried.
- Diluting UTILITY RELEASE 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.

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 product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- Form surfaces do not have to be completely dry in order to apply UTILITY RELEASE. Small quantities of water on the form surface, such as dew, will not affect its performance.
- UTILITY RELEASE must be diluted prior to use. Product may be diluted with water, kerosene or fuel oil (see PRECAUTIONS). Typical dilution rate is one part UTILITY RELEASE to seven parts diluent, or in other words, one quart UTILITY RELEASE to seven



chemical solutions to concrete problems

quarts dituent; one gallon UTILITY RELEASE to seven gallons diluent; etc.

- To simplify dilution of UTILITY RELEASE 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 below.
- UTILITY RELEASE is most easily applied using NOX-CRETE'S low pressure, hand pump THE PERFECT FORM & CONCRETE SPRAYER or THE IDEAL FORM & CONCRETE SPRAYER. Best results are obtained when a uniform application of UTILITY RELEASE is applied to all form surfaces. Allow coated form surfaces to adequately dry prior to placing concrete.
- Application rate required is a function of form composition, surface texture and porosity. It should be verified with test application. Typical range is 400-2,000 sf/gal. (10-50 sm/l).
- Do not over apply. Excess material, runs and puddles can adversely affect performance and should be picked up promptly with rags.
- Ambient form surface temperature must be in excess of 32° F (0° C) to prevent product from freezing if diluted with water.
- Prevent material overspray from contacting reinforcing steel and/or tensioning cables.
- Application equipment and overspray can be cleaned with soap and water.
- For use as a maintenance coating, dilute one part UTILITY RELEASE to three parts water or other diluent.

- TECHNICAL DATA -

Bulk Density	, 7,7 lbs./gal. (0.92 kg/l)
Flash Point	>200° F (>93° C)
Color ,	
Odor	Pleasant
VOC	<150 g/l
VP	<10,0 mmHg

PACKAGING -

Product is packaged in 1 gal. (3.8 l) jugs, 5 gal. (19 l) pails and 55 gal. (208 l) drums.

- 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 warral limitation of liability and 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 buries to the ourchaser.

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 this 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

TO ENSURE PROPER DILUTION RATIO, SELECT THE PROPER MIXING PLUG BASED ON THE ACTUAL TEMPERATURE OF THE PRODUCT.
PRODUCT TEMPERATURE AND AMBIENT TEMPERATURE ARE NOT NECESSARILY THE SAME.

Release Agent Use

7:1 Recommended Dilution Ratio

Plug #	Product Temperature
2	40° F (4.4° C) - 52° F (11° C)
1	520 E (110 C) - 850 E (29 A) C)

Maintenance Coating Use

2:1 Recommended Dilution Ratio

Plug # Product TemperatureRemove Plug 40° F (4.4° C) - 85° F (29.4° C)

Updated 09/07/10. This version supersedes all previous versions.

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UTILITY RELEASE CONCENTRATE

1. Product And Company Identification

<u>Manufacturer</u>

.

NOX-CRETE MANUFACTURING INC

1444 SOUTH 20TH STREET

OMAHA, NE 68108

Contact Information

FAX Number: 402-341-9752

E-Mail: corporate@nox-crete.com Web Site: www.nox-crete.com

Emergency Phone Number

CHEMTREC: 800-424-9300

CHEMTREC OUTSIDE OF U.S.: 703-527-3887

Manufacturer Phone Number

402-341-2080

Issue Date: 05/04/2010

Product Name: UTILITY RELEASE CONCENTRATE

Chemical Family: CONCENTRATED CONCRETE FORM RELEASE AGENT

MSDS Number: 7
Product Code: URC

2. Hazards Identification

Primary Routes(s) Of Entry

Eye Contact, Ingestion, Inhalation, Skin Contact

Eye Hazards

May cause eye imitation.

Skin Hazards

May cause skin irritation.

Ingestion Hazards

Aspiration hazard if swallowed. Can enter lungs and cause damage.

Inhalation Hazards

May be harmful if inhaled.

3. Composition/Information On Hazardous Ingredients

Ingredient Name	CAS Number
POLYETHYLENE GLYCOL OCTYLPHENYL ETHER	9036-19-5
SEVERELY HYDROTREATED PETROLEUM DISTILLATE	Trade Secret

Pursuant to 29CFR 1910.1200 the specific chemical identity is being withheld as Trade Secret, while all health and safety properties and effects are included in the MSDS.

4. First Aid Measures

<u>Еуе</u>

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water. Wash clothing before reuse. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

UTILITY RELEASE CONCENTRATE

4. First Aid Measures - Continued

Ingestion

If swallowed, do not induce vomiting. Get medical attention immediately.

Inhalation

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.

5. Fire Fighting Measures

Flash Point: >200 °F >94 °C Flash Point Method: PMCC

Extinguishing Media

Use CO2 (Carbon Dioxide), dry chemical, or foam.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear. Water can be used to cool and protect exposed material. Avoid spreading burning liquid with water used for cooling purposes.

6. Accidental Release Measures

Eliminate any ignition source. Dike or impound spilled material. Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect into vapor tight containers and dispose of properly.

7. Handling And Storage

Handling Precautions

Keep container closed when not in use. Use only with adequate ventilation.

Storage Precautions

Store product in a cool, dry environment away from sources of ignition.

Work/Hygienic Practices

Wash thoroughly with soap and water after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate ventilation to keep product vapor concentrations below specified TLV.

Eye/Face Protection

Chemical goggles and/or face shields are required to prevent potential eye contact, irritation or injury.

Skin Protection

Wash exposed skin frequently with soap and water. Soiled clothing should be laundered before reuse.

Respiratory Protection

General room ventilation is normally adequate. Avoid breathing the product mist. The use of a NIOSH approved respirator is recommended whenever the airborne concentrations exceed the TLV.

Ingredient(s) - Exposure Limits

POLYETHYLENE GLYCOL OCTYLPHENYL ETHER

N/E

SEVERELY HYDROTREATED PETROLEUM DISTILLATE

5 mg/m3 as mist

UTILITY RELEASE CONCENTRATE

9. Physical And Chemical Properties

Appearance

Clear light straw color with pleasing odor.

Chemical Type: Mixture Physical State: Liquid

Boiling Point: 350-500 °F 175-260 °C Specific Gravity: Lighter than water

Packing Density: 7.65 lbs per gallon 0.918 kg per liter

Solubility: Soluble

Evaporation Rate: Slower than ether VOC: Less than 100 grams per liter Flash Point: >200 F >94 C (PMCC)

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and various hydrocarbon derivatives.

11. Toxicological Information

Chronic/Carcinogenicity

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

12. Ecological Information

No Data Available...

13. Disposal Considerations

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all applicable local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. Transport Information

Proper Shipping Name

Compounds, Mold Release, N.O.I.

Hazard Class

N/A

Freight Class

Class 60

15. Regulatory Information

SARA Section 313 Notification

This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

UTILITY RELEASE CONCENTRATE

15. Regulatory Information - Continued

State Regulations

Proposition 65: WARNING. This product contains one or more chemicals known to the State of California to cause cancer and/or reproductive toxicity.

<u>NFPA</u>	<u>HMIS</u>
100	HEALT
	FLAM
	REACT
	PERSO

<u>HMIS</u>	
HEALTH	1
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	X

16. Other Information

Revision/Preparer Information MSDS Preparer: David MacFarlane

This MSDS Supersedes A Previous MSDS Dated: 01/31/2007

Reference Documentation

The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyers risk. We have made no effort to censor or to conceal deleterious aspects of this product. Further since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the health and/or safety precautions we have suggested will be adequate for all individuals and /or situations involving its handling or use. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

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NOX-CRETE MANUFACTURING INC

Printed Using MSOS Generator * 2000



PRO-RELEASE

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

HOW IT WORKS -

Pro-Release 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 stag.

- APPLICATIONS

- Use on B-B plywood, plywood faced handset forms, steel and aluminum.
- Use in both commercial and residential forming applications.

- ADVANTAGES -

- Chemical and barrier components provide improved release for most concrete mix designs, including mixes containing pozzolans such as fly ash or blast furnace slag.
- Positively prevents concrete buildup accumulation and helps to breakdown existing buildup through regular use,
- Economical alternative to higher cost specialty type form release agents when cost objectives outweigh performance requirements.
- Dries fast and is not slippery.
- Green Engineered™ better for health and the environment
- Resists removal by normal rain showers.
- Does not contain diesel fuel or kerosene.
- Also available with WINTER GUARD™ additive for cold weather application and storage. With WINTER GUARD,™ PRO-RELEASE 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.
- Low odor, nonflammable, water based formulation is safe to use and meets all federal and state VOC requirements.

- 🛕 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 for aggressive stripping schedules where forms are to be removed in less than 12 hours unless artifical heat or accelerating admixtures are used to speed concrete curing.
- 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.
- Generally not recommended for use in architectural concrete forming applications without verifying performance and concrete appearance with a fieldscale mock-up.
- Protect PRO-RELEASE 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 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).
- 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 PRO-RELEASE if temperature is at or below 32° F (0° C). Applications of PRO-RELEASE that have dried are not affected by freezing temperatures. For application in temperatures as low as 25° F (-4° C), use PRO-RELEASE with WINTER GUARD.™

- 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

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chemical solutions to concrete problems

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

- Mix product thoroughly before use.
- The typical application range is 600 800 st/gal (15 20 sm/l) depending upon substrate. Conduct a test application to verify the proper application rate for your use.
- Pro-Release is most easily applied using a low pressure sprayer. For hand pump spray applications, use NOX-CRETE'S PERFECT FORM AND CONCRETE SPRAYER or the more economical IDEAL FORM AND CONCRETE SPRAYER. Best results are obtained when a uniform application of Pro-Release is applied 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 tension cables.
- Application equipment and material overspray can be easily cleaned with detergent and water.

TECHNICAL DATA	
Bulk Density	8.2 lbs/gal. (0.98 kg/l)
Flash Point	>200° F (>93° C)
Odor	Pleasant
VOC	<20 g/i*
	<17 mmHg
*PRO-RELEASE with WINT	ER GUARD™ VOC<120 g/l

PACKAGING -

Product is packaged in 5.28 gal (201) bag-in-a-box, 5 gal (191) pails and 55 gal (2081) drums.

- SHELF LIFE —

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

- HANDLING/STORAGE -

PRO-RELEASE (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 with WINTER GUARD™ can withstand storage under freezing conditions.

--- 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 land 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 warve 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 concarring 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.

PRO RELEASE

1. Product And Company Identification

Manufacturer

a 1 - - , -

NOX-CRETE MANUFACTURING INC

1444 SOUTH 20TH STREET

OMAHA, NE 68108

Contact Information

FAX Number: 402-341-9752 E-Mail: corporate@nox-crete.com

Web Site: www.nox-crete.com

Emergency Phone Number

CHEMTREC: 800-424-9300

CHEMTREC OUTSIDE OF U.S.: 703-527-3887

Manufacturer Phone Number

402-341-2080

Issue Date: 03/17/2010

Product Name: PRO RELEASE

Chemical Family: WATER BASE CONCRETE FORM RELEASE AGENT

MSDS Number: 212 Product Code: PRO

2. Hazards Identification

Primary Routes(s) Of Entry

Eye Contact, Ingestion, Inhalation, Skin Contact

Eye Hazards

May cause eye imitation.

Skin Hazards

May cause skin irritation.

Ingestion Hazards

Aspiration hazard if swallowed. Can enter lungs and cause damage.

Inhalation Hazards

May be harmful if inhaled.

3. Composition/Information On Hazardous Ingredients

Ingredient	CAS	
Name	Number	
SEVERELY HYDROTREATED PETROLEUM DISTILLATE	Trade Secret	

Pursuant to 29CFR 1910.1200 the specific chemical identity is being withheld as Trade Secret, while all health and safety properties and effects are included in the MSDS.

4. First Aid Measures

Eve

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water. Wash clothing before reuse. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

PRO RELEASE

4. First Aid Measures - Continued

Ingestion

If swallowed, do not induce vomiting. Get medical attention immediately.

<u>Inhalation</u>

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.

5. Fire Fighting Measures

Flash Point: >200 °F >94 °C Flash Point Method: PMCC

Extinguishing Media

Use CO2 (Carbon Dioxide), dry chemical, or foam.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear. Water can be used to cool and protect exposed material. Avoid spreading burning liquid with water used for cooling purposes.

6. Accidental Release Measures

Eliminate any ignition source. Dike or impound spilled material. Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect into vapor tight containers and dispose of property.

7. Handling And Storage

Handling Precautions

Keep container closed when not in use. Use only with adequate ventilation.

Storage Precautions

Store product in a cool, dry environment away from sources of ignition. Prevent exposure to freezing temperatures.

Work/Hyglenic Practices

Wash thoroughly with soap and water after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate ventilation to keep product vapor concentrations below specified TLV.

Eye/Face Protection

Chemical goggles and/or face shields are required to prevent potential eye contact, irritation or injury.

Skin Protection

Wash exposed skin frequently with soap and water. Soiled clothing should be laundered before reuse.

Respiratory Protection

General room ventilation is normally adequate. Avoid breathing the product mist. The use of a NIOSH approved respirator is recommended whenever the airborne concentrations exceed the TLV.

Ingredient(s) - Exposure Limits

SEVERELY HYDROTREATED PETROLEUM DISTILLATE

5 mg/m3 as mist

9. Physical And Chemical Properties

Appearance

Milky white liquid with slight organic odor.

PRO RELEASE

9. Physical And Chemical Properties - Continued

Chemical Type: Mixture
Physical State: Liquid
Boiling Point: 212 °F 100 °C
Specific Gravity: Lighter than water

Packing Density: 8.1 lbs per gallon 0.972 kg per liter

Solubility: Soluble

Evaporation Rate: Slower than ether VOC: Less than 100 grams per liter Flash Point: >200 F >94 C (PMCC)

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and various hydrocarbon derivatives.

11. Toxicological Information

Chronic/Carcinogenicity

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

12. Ecological Information

No Data Available...

13. Disposal Considerations

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all applicable local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. Transport Information

Proper Shipping Name

Compounds, Mold Release, N.O.I.

Hazard Class

N/A

Freight Class

Class 60

15. Regulatory Information

SARA Section 313 Notification

This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

State Regulations

Proposition 65: WARNING. This product contains one or more chemicals known to the State of California to cause cancer and/or reproductive toxicity.

MATERIAL SAFETY DATA SHEET PRORELEASE

NFPA	HMIS
	HEALTH 1
	FLAMMABILITY 1
	REACTIVITY
	PERSONAL PROTECTION X
·	

16. Other Information

Revision/Preparer Information
MSD\$ Preparer: David MacFarlane

This MSDS Supersedes A Previous MSDS Dated: 03/05/2007

Reference Documentation

The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyers risk. We have made no effort to censor or to conceal deleterious aspects of this product. Further since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the health and/or safety precautions we have suggested will be adequate for all individuals and /or situations involving its handling or use. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

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NOX-CRETE MANUFACTURING INC

Printed Using MSDS Generator* 2000



FORM CLEAN

Chemically active maintenance coating and concrete form release agent.

Petroleum Based Version = FORM CLEAN • Water Based Version = FORM CLEAN E

. HOW IT WORKS -

FORM CLEAN chemically reacts with concrete on the form surface to prevent hardening of fresh concrete and to soften hardened concrete buildup while also functioning as a release agent.

- APPLICATIONS -

- Use on most form surfaces, such as aluminum, steel, plastic and HDO, PSF and CBF plywood, whenever excessive concrete buildup becomes a problem.
- Use on forms still in service or on forms in storage.

- ADVANTAGES -

- Reduces concrete buildup when applied immediately after form removal by chemically reacting with the fresh concrete to prevent further hardening while also slowly softening existing hardened concrete buildup.
- Softened buildup is easily removed using a power washer. (Excessive hardened buildup may require repeated use to soften it enough for power washing.)
- Applied to forms currently in service, FORM CLEAN acts as a release agent while simultaneously functioning as a maintenance coating.
- Softens buildup when applied to forms in storage.
 Can then be reapplied and used as a release agent without any additional cleaning.
- More economical and less damaging to forms than sandblasting, acid cleaning or scraping.
- Frequent use helps keep forms clean and free of hardened concrete buildup.
- Aluminum forms will not need to be reseasoned after using FORM CLEAN.
- Cannot be removed by normal rainfall.
- FORM CLEAN is petroleum based. FORM CLEAN E is water based. FORM CLEAN E is also available in a concentrated version which is shipped in short-filled containers.
- Petroleum based version is sprayable even at temperatures below freezing (32° F/ 0° C).
- FORM CLEAN E is Green Engineered [™] better for health and the environment.
- VOC compliant in all U.S. states.

- lacktriangle Precautions lacktriangle -

- 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.
- Due to its highly reactive nature, FORM CLEAN should only be used as a release agent on new aluminum forms, aluminum forms that have been aggressively cleaned or forms of any type exhibiting concrete buildup.
- FORM CLEAN E is not intended for application under freezing conditions. (Freezing temperatures have no effect on petroleum based FORM CLEAN.)
- Protect FORM CLEAN 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.

- 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 product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- FORM CLEAN E in the concentrated version is shipped in a short-filled container and requires dilution

nox-cret e

chemical solutions to concrete problems

by filling the container to capacity with water and mixing well. FORM CLEAN 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.

- Application rates necessary to optimize performance vary with form composition, condition of the form surface, extent of concrete buildup and ambient temperature.
- The typical application range for form surfaces with an average amount of buildup is 1,000-1,500 sf/gal (25-37 sm/l).
- The typical application range for forms with an excessive amount of buildup is 500-1,000 sf/gal (12-25 sm/l).
- Best results are obtained when FORM CLEAN is applied to form surfaces immediately following form removal.
- Older buildup generally requires successive applications and takes longer to soften than fresh concrete buildup.
- Forms in active service generally require six to ten applications of FORM CLEAN applied as a release agent over a two to three week period to fully soften hardened buildup.
- Forms in storage generally require two to three applications of FORM CLEAN applied as a maintenance coating over a two to three week period.
- Once all buildup has become adequately softened, the buildup can be easily removed using a 3,000-4,000 psi pressure washer. If buildup is too hard for the pressure washer to remove, additional applications of FORM CLEAN will be necessary until all buildup is sufficiently softened.
- To minimize future concrete buildup accumulation on cleaned form surfaces, use of NOX-CRETE'S release agents are recommended.

TECHNICAL DATA -

	FORM CLEAN	FORM CLEAN E
Bulk Density	7.2 lbs/gal. (0.9 kg/l)	. 8.2 lbs/gal (.985 kg/l)
Viscosity ASTM D-88	.,42.0 SUS ,	N/A
Pour Point ASTM D-97	20° F (-28.9° C)	N/A
Flash Point ASTM 0-92	.>130° F (49° C)	>200° F (93° C)
Color	Light Straw	Milky
Odor	Light	Light
voc	<250 g/l	<100 g/l
Freeze Point	50° F (>-40° C)	32* F (0° C)

PACKAGING -

Product is packaged in 5 gal (19 l) pails (FORM CLEAN), 5.28 gal (20 l) bag-in-a-box (FORM CLEAN 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). Store drums in manner so as to prevent moisture from accumulating on drums heads, as moisture may be drawn into sealed drums during temperature induced volumetric changes of liquid contents.

— 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 the product for sale subject to, and Buyer and all users are deemed to have accepted, the following conditions of sale and lunded 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 bruitation of liability sait 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 carron, 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 table for special, advised 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.

Updated 04/30/10. This version supersedes all previous versions.

Form Clean (All Versions) p. 2

FORM-CLEAN

1. Product And Company Identification

<u>Manufaçturer</u>

NOX-CRETE MANUFACTURING INC

1444 SOUTH 20TH STREET

OMAHA, NE 68108

Contact Information

FAX Number: 402-341-9752

E-Mail: corporate@nox-crete.com

Web Site: www.nox-crete.com

Emergency Phone Number

CHEMTREC: 800-424-9300

CHEMTREC OUTSIDE OF U.S.: 703-527-3887

Manufacturer Phone Number

402-341-2080

Issue Date: 04/05/2010

Product Name: FORM-CLEAN

Chemical Family: PETROLEUM BASED CONCRETE FORM RELEASE AGENT

MSDS Number: 39 Product Code: FCL

2. Hazards Identification

Primary Routes(s) Of Entry

Eye Contact, Ingestion, Inhalation, Skin Contact

Eye Hazards

May cause eye irritation.

<u>Skin Hazards</u>

May cause skin irritation.

Ingestion Hazards

Aspiration hazard if swallowed. Can enter lungs and cause damage.

inhalation Hazards

May be harmful if inhaled.

3. Composition/Information On Hazardous Ingredients

Ingredient Name	CAS Number
PETROLEUM DISTILLATES	Trade Secret
SEVERELY HYDROTREATED PETROLEUM DISTILLATE	Trade Secret

Pursuant to 29CFR 1910.1200 the specific chemical identity is being withheld as Trade Secret, while all health and safety properties and effects are included in the MSDS.

4. First Aid Measures

<u> Eye</u>

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water. Wash clothing before reuse. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

FORM-CLEAN

4. First Aid Measures - Continued

Ingestion

If swallowed, do not induce vomiting. Get medical attention immediately.

Inhalation

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.

5. Fire Fighting Measures

Flash Point: > 130 °F > 55 °C Flash Point Method: PMCC

Extinguishing Media

Use CO2 (Carbon Dioxide), dry chemical, or foam.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear. Water can be used to cool and protect exposed material. Avoid spreading burning liquid with water used for cooling purposes.

6. Accidental Release Measures

Eliminate any ignition source. Dike or impound spilled material. Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect into vapor tight containers and dispose of properly.

7. Handling And Storage

Handling Precautions

Keep container closed when not in use. Use only with adequate ventilation.

Storage Precautions

Store product in a cool, dry environment away from sources of ignition.

Work/Hygienic Practices

Wash thoroughly with soap and water after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate ventilation to keep product vapor concentrations below specified TLV.

Eye/Face Protection

Chemical goggles and/or face shields are required to prevent potential eye contact, irritation or injury.

Skin Protection

Wash exposed skin frequently with soap and water. Soiled clothing should be laundered before reuse.

Respiratory Protection

General room ventilation is normally adequate. Avoid breathing the product mist. The use of a NIOSH approved respirator is recommended whenever the airbome concentrations exceed the TLV.

Ingredient(s) - Exposure Limits

PETROLEUM DISTILLATES

100 ppm

SEVERELY HYDROTREATED PETROLEUM DISTILLATE

5 mg/m3 as mist

FORM-CLEAN

9. Physical And Chemical Properties

Appearance

Clear light straw color with pleasing odor.

Chemical Type: Mixture Physical State: Liquid Boiling Point: 350-750 °F

Specific Gravity: Lighter than water

Packing Density: 7.2 lbs per gallon 0.864 kg per liter

Solubility: Negligable

Evaporation Rate: Slower than ether VOC: Less than 450 grams per liter Flash Point: >130 F >55 C (PMCC)

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and various hydrocarbon derivatives.

11. Toxicological Information

Chronic/Carcinogenicity

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

12. Ecological Information

No Data Available...

13. Disposal Considerations

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all applicable local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. Transport Information

Proper Shipping Name

Compounds, Mold Release, N.O.I. NMFC# 50244

Freight Class

60

15. Regulatory Information

SARA Section 313 Notification

This product does not contain any ingredients subject to the reporting requirments of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

MATERIAL SAFETY DATA SHEET FORM-CLEAN

<u>NFPA</u>	<u>HMIS</u>	
	HEALTH 2	
220	FLAMMABILITY 2	
	REACTIVITY 0	
	PERSONAL PROTECTION X	
		

16. Other Information

Revision/Preparer Information
MSDS Preparer: David MacFarlane

This MSDS Supersedes A Previous MSDS Dated: 04/02/2007

Reference Documentation

The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyers risk. We have made no effort to censor or to conceal deleterious aspects of this product. Further since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the health and/or safety precautions we have suggested will be adequate for all individuals and /or situations involving its handling or use. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

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NOX-CRETE MANUFACTURING INC

Printed Using MSOS Generator™ 2000



NOX-CRETE FORM COATING

The world's FIRST chemically active concrete form release agent.

Petroleum Based Version = NOX-CRETE FORM COATING • Water Based Version = NOX-CRETE FORM COATING E
Biodegradable Water Based Version = NOX-CRETE FORM COATING EB
International/Precast Version = NOX-CRETE FORM COATING IP

. HOW IT WORKS -

NOX-CRETE FORM COATING chemically reacts instantly upon contact with fresh concrete, positively preventing bonding with the form surface. Byproducts of this chemical reaction waterproof wood forms, greatly extending their useful life. Reacts with steel forms to produce iron soaps, minimizing the formation of rust.

APPLICATIONS -

- Gives exceptional and unduplicated results on non-overlaid plywood, dimensional lumber and MDO plywood forms and plywood faced handset forms.
- Designed for use on most all forms, including wood, steel and plastic.

- ADVANTAGES -

- A proven performer since its introduction in 1956 as the world's first chemically active form release agent.
- Substantially reduces concrete surface voids (bugholes) and will not stain concrete surfaces when properly applied.
- Provides easy, crisp positive release and eliminates the need for pry tools, minimizing form stripping damage.
- Minimizes concrete buildup and dramatically reduces form maintenance costs since forms require little, if any, cleaning.
- Extends the life of wood forms by reducing the absorption of destructive alkaline bleed water.
- Drys on form surfaces and is not slippery.
- Prevents accumulation of dust and resists removal by normal rain showers.
- Concrete surfaces are free of residue and the natural bonding characteristics of paints, plasters, mortars, epoxies and other surface coatings are not affected when NOX-CRETE FORM COATING is properly applied.
- Softens and removes thin scale pre-existing concrete buildup through repeated use.
- When applied to the metal edges of modular hand-set forms, forms become self cleaning through use, significantly reducing erection time.
- Available in a low 250 g/l, VOC compliant version (FORM COATING), an international/precast version (FORM COATING IP), a water based version (FORM COATING E) and a water based, biodegradable version (FORM COATING E8). FORM COATING E is also available in a concentrated version which is shipped in a short-filled container.

- Petroleum based versions apray easily at temperatures down to -20° F (-29° C).
- NOX-CRETE FORM COATING EB complies with the US EPA OPPTS 835.31101 Test Protocol For Ready Biodegradability.
- NOX-CRETE FORM COATING E and EB are Green Engineered™ – better for health and the environment.
- NOX-CRETE FORM COATING, FORM COATING E and FORM COATING EB comply with the more restrictive air quality, lower VOC requirements of some states.

A PRECAUTIONS A

- 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 plaster waste molds without first applying a suitable sealer.
- Do not use when forms are to be removed in less than 12 hours unless artificial heat is used to accelerate concrete cure.
- Application to non-reactive, nonabsorbent plastic or fiberglass forms may be subject to removal by heavy rain. In such exposure situations, the use of NOX-CRETE PCS or PCE is recommended.
- Prevent contact with reinforcing steel. Removal may be accomplished with mineral spirits or naphtha.
- Do not apply NOX-CRETE FORM COATING to any type of foam or rubber form surface. NOX-CRETE FORM COATING E or EB, PCE and BIO-NOX are generally suitable for use on these form surfaces. Conduct a test application to verify compatibility.
- NOX-CRETE FORM COATING E and EB are not intended for application under freezing conditions. (Freezing temperatures have no effect on petroleum based NOX-CRETE FORM COATING.)
- Protect NOX-CRETE FORM COATING E and EB 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.



chemical solutions to concrete problems

 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.

- 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 product and quantities purchased can be satisfactorily applied and will achieve desired appearance and performance under intended use conditions.
- NOX-CRETE FORM COATING 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. NOX-CRETE FORM COATING E and EB 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.
- Typical application rate for non-porous form surfaces such as steel, plastic, high density plywood or PRE-FORM or other resin coated plywood is 3,000 st/gal.
- Typical application rate for semi-porous form surfaces such as medium density plywood and paper column forms is 1,500-2,000 SF/gal.
- Typical application rate for porous form surfaces such as non-overlaid or unsealed plywood is 1,000 sf/gal.
- Typical application rate for very porous form surfaces such as dimensional lumber, rough sawn lumber and striated plywood is 800 sf/gal.
- Form surfaces should be reasonably dry and clean of buildup, rust, mill scale and any existing form oil prior to application. Replace damaged panels prior to treatment.
- Apply in thin films to maximize product performance and economy.
- Spray application is recommended using THE NOX-CRETE PERFECT FORM & CONCRETE or PERFECT POWER SPRAYER. Both are equipped with the proper nozzle size to ensure uniform product distribution.
- Excess material in the form of puddles, etc., should be picked up with rags.

- TECHNICAL DATA -

Bulk Density Petroleum Based Versions Water Based Versions	
Pour Point, ASTM D-97 Petroleum Based Versions Water Based Versions	20° F (-29° C)
Flash Point, ASTM D-93 Petroleum Based Versions	
Color, ASTM D-1500 Petroleum Based Versions Water Based Versions	1.0
VOC, EPA Test Method 24 Nox-Crete Form Coating	<250 g/l
Nox-Crete Form Coating IP Nox-Crete Form Coating E Nox-Crete Form Coating EB	<150 g/l

- PACKAGING -

Packaged in 5 gal (19 l) pails (NOX-CRETE FORM COATING and NOX-CRETE FORM COATING IP), 5.28 gal (20 l) bag-in-a-box (NOX-CRETE FORM COATING E and NOX-CRETE FORM COATING EB), 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 eccepted, the following conditions of sake 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 warve limitation of sabelity set forth before.

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 emount than the purchase price of like 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.

Updated 04/14/10. This version supersedes all previous versions.

Nox-Crete Form Coating (All Versions) p. 2

NOX-CRETE FORM COATING E

1. Product And Company Identification		
Manufacturer NOX-CRETE MANUFACTURING INC 1444 SOUTH 20TH STREET OMAHA, NE 68108	Contact Information	,
	FAX Number: 402-341-9752 E-Mail: corporate@nox-crete.com Web Site: www.nox-crete.com	
Emergency Phone Number CHEMTREC: 800-424-9300 CHEMTREC OUTSIDE OF U.S.: 703-527-3887	Manufacturer Phone Number 402-341-2080	

Issue Date: 05/04/2010

Product Name: NOX-CRETE FORM COATING E

Chemical Family: WATER BASED CONCRETE FORM RELEASE AGENT

MSDS Number: 14 Product Code: FCE

2. Hazards Identification

Primary Routes(s) Of Entry

Eye Contact, Ingestion, Inhalation, Skin Contact

Eye Hazards

May cause eye irritation.

Skin Hazards

May cause skin irritation.

Ingestion Hazards

Aspiration hazard if swallowed. Can enter lungs and cause damage.

Inhalation Hazards

May be harmful if inhaled.

3. Composition/Information On Hazardous Ingredients	
CAS Number	-
Trade Secret	
-	Number

Pursuant to 29CFR 1910.1200 the specific chemical identity is being withheld as Trade Secret, while all health and safety properties and effects are included in the MSDS.

4. First Aid Measures

<u>Eye</u>

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

Skin

Remove contaminated clothing and shoes. Wash affected areas with soap and water. Wash clothing before reuse. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

NOX-CRETE FORM COATING E

4. First Aid Measures - Continued

Ingestion

If swallowed, do not induce vomiting. Get medical attention immediately.

Inhalation

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.

5. Fire Fighting Measures

Flash Point: >200 °F >94 °C Flash Point Method: PMCC

Extinguishing Media

Use CO2 (Carbon Dioxide), dry chemical, or foam.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear. Water can be used to cool and protect exposed material. Avoid spreading burning liquid with water used for cooling purposes.

6. Accidental Release Measures

Eliminate any ignition source. Dike or impound spilled material. Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect into vapor tight containers and dispose of properly.

7. Handling And Storage

Handling Precautions

Keep container closed when not in use. Use only with adequate ventilation.

Storage Precautions

Store product in a cool, dry environment away from sources of ignition. Prevent exposure to freezing temperatures.

Work/Hygienic Practices

Wash thoroughly with soap and water after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate ventilation to keep product vapor concentrations below specified TLV.

Eye/Face Protection

Chemical goggles and/or face shields are required to prevent potential eye contact, irritation or injury.

Skin Protection

Wash exposed skin frequently with soap and water. Soiled clothing should be laundered before reuse.

Respiratory Protection

General room ventilation is normally adequate. Avoid breathing the product mist. The use of a NIOSH approved respirator is recommended whenever the airborne concentrations exceed the TLV.

Ingredient(s) - Exposure Limits

SEVERELY HYDROTREATED PETROLEUM DISTILLATE

5 mg/m3 as mist

9. Physical And Chemical Properties

<u>Appearance</u>

White emulsion with a slight pleasing odor.

NOX-CRETE FORM COATING E

9. Physical And Chemical Properties - Continued

Chemical Type: Mixture
Physical State: Liquid
Boiling Point: 212 °F 100 °C
Specific Gravity: Lighter than water

Packing Density: 8.1 lbs per gallon 0.972 kg per liter

Solubility: Soluble

Evaporation Rate: Slower than ether VOC: Less than 100 grams per liter Flash Point: >200 F >94 C (PMCC)

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials
Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and various hydrocarbon derivatives.

11. Toxicological Information

Chronic/Carcinogenicity

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

12. Ecological Information

No Data Available...

13. Disposal Considerations

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all applicable local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. Transport Information

Proper Shipping Name

Compounds, Mold Release, N.O.I.

Freight Class

Class 60

15. Regulatory Information

SARA Section 313 Notification

This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

State Regulations

Proposition 65: WARNING. This product contains one or more chemicals known to the State of California to cause cancer and/or reproductive toxicity.

NOX-CRETE FORM COATING E

<u>NFPA</u>	HMIS
	HEALTH 1
	FLAMMABILITY 1
	REACTIVITY 0
	PERSONAL PROTECTION X

16. Other Information

Revision/Preparer Information MSDS Preparer: David MacFarlane

This MSDS Supersedes A Previous MSDS Dated: 06/13/2007

Reference Documentation

The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyers risk. We have made no effort to censor or to conceal deleterious aspects of this product. Further since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the health and/or safety precautions we have suggested will be adequate for all individuals and /or situations involving its handling or use. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

Disclaimer

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NOX-CRETE MANUFACTURING INC

Printed Using MSDS Generator™ 2000

NOX-CRETE FORM COATING EB

1. Product And Company Identification

Manufacturer

NOX-CRETE MANUFACTURING INC

1444 SOUTH 20TH STREET

OMAHA, NE 68108

Contact Information

FAX Number: 402-341-9752 E-Mail: corporate@nox-crete.com

Web Site: www.nox-crete.com

Emergency Phone Number

CHEMTREC: 800-424-9300

CHEMTREC OUTSIDE OF U.S.: 703-527-3887

Manufacturer Phone Number

402-341-2080

Issue Date: 07/19/2010

Product Name: NOX-CRETE FORM COATING EB

Chemical Family: BIODEGRADABLE WATER BASED CONCRETE FORM RELEASE AGENT

MSDS Number: 110 Product Code: FCEB

2. Hazards Identification

Primary Routes(s) Of Entry

Eye Contact, Ingestion, Inhalation, Skin Contact

Eye Hazards

May cause eye irritation.

Skin Hazards

May cause skin irritation.

Ingestion Hazards

Aspiration hazard if swallowed. Can enter lungs and cause damage.

Inhalation Hazards

May be harmful if inhaled.

3. Composition/Information On Hazardous Ingredients

Ingredient	CAS		
Name	Number		
SEVERELY HYDROTREATED PETROLEUM DISTILLATE	Trade Secret		

Pursuant to 29CFR 1910.1200 the specific chemical identity is being withheld as Trade Secret, while all health and safety properties and effects are included in the MSDS.

4. First Aid Measures

<u>Eye</u>

In case of contact, hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

<u>Skin</u>

Remove contaminated clothing and shoes. Wash affected areas with soap and water. Wash clothing before reuse. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

NOX-CRETE FORM COATING EB

4. First Aid Measures - Continued

Ingestion

If swallowed, do not induce vomiting. Get medical attention immediately.

Inhalation

If irritation, headache, nausea, or drowsiness occurs, remove to fresh air. Get medical attention if breathing becomes difficult or symptoms persist.

5. Fire Fighting Measures

Flash Point: > 200 °F > 94 °C Flash Point Method: PMCC

Extinguishing Media

Use CO2 (Carbon Dioxide), dry chemical, or foam.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear. Water can be used to cool and protect exposed material. Avoid spreading burning liquid with water used for cooling purposes.

6. Accidental Release Measures

Eliminate any ignition source. Dike or impound spilled material, Contain and/or absorb spill with inert material (e.g. sand, vermiculite). Collect into vapor tight containers and dispose of property.

7. Handling And Storage

Handling Precautions

Keep container closed when not in use. Use only with adequate ventilation.

<u>Storage Precautions</u>

Store product in a cool, dry environment away from sources of ignition. Prevent exposure to freezing temperatures.

Work/Hygienic Practices

Wash thoroughly with soap and water after handling.

8. Exposure Controls/Personal Protection

Engineering Controls

Use with adequate ventilation to keep product vapor concentrations below specified TLV.

Eye/Face Protection

Chemical goggles and/or face shields are required to prevent potential eye contact, irritation or injury.

Skin Protection

Wash exposed skin frequently with soap and water. Soiled clothing should be laundered before reuse.

Respiratory Protection

General room ventilation is normally adequate. Avoid breathing the product mist. The use of a NIOSH approved respirator is recommended whenever the airborne concentrations exceed the TLV.

Ingredient(s) - Exposure Limits

SEVERELY HYDROTREATED PETROLEUM DISTILLATE

5 mg/m3 as mist

9. Physical And Chemical Properties

<u>Appearance</u>

White emulsion with a slight pleasing odor.

NOX-CRETE FORM COATING EB

9. Physical And Chemical Properties - Continued

Chemical Type: Mixture
Physical State: Liquid
Boiling Point: 212 °F 100 °C
Specific Gravity: Lighter than water

Packing Density: 8.1 lbs per gallon .97 kg per liter

Solubility: Soluble

Evaporation Rate: Slower than ether VOC: Less than 100 grams per liter Flash Point: >200 F > 94 C (PMCC)

10. Stability And Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Incompatible Materials Strong oxidizing agents.

Hazardous Decomposition Products

Combustion may produce carbon monoxide, carbon dioxide, and various hydrocarbon derivatives.

11. Toxicological Information

Chronic/Carcinogenicity

No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

12. Ecological Information

Environmental Fate Information

Readily biodegradable when tested in accordance with the OECD 301/EPA OPPTS 835.3110 test protocols.

13. Disposal Considerations

Care must be taken to prevent environmental contamination from the use of this material. The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all applicable local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

14. Transport Information

Proper Shipping Name

Compounds, Mold Release, N.O.I.

Freight Class

Class 60

15. Regulatory Information

SARA Section 313 Notification

This product does not contain any ingredients regulated under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 or 40 CFR 372.

State Regulations

Proposition 65: WARNING. This product contains one or more chemicals known to the State of California to cause cancer and/or reproductive toxicity.

NOX-CRETE FORM COATING EB

HMIS		
HEALTH 1		
FLAMMABILITY 1		
REACTIVITY 0		
PERSONAL PROTECTION X		
	HEALTH 1 FLAMMABILITY 1 REACTIVITY 0	HEALTH 1 FLAMMABILITY 1 REACTIVITY 0

16. Other Information

Revision/Preparer Information
MSDS Preparer: David MacFarlane

This MSDS Supersedes A Previous MSDS Dated: 02/05/2010

Reference Documentation

The information contained herein is based on data available to us and is believed to be correct. Since this information may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and Buyer may rely thereon only at Buyers risk. We have made no effort to censor or to conceal deleterious aspects of this product. Further since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the health and/or safety precautions we have suggested will be adequate for all individuals and /or situations involving its handling or use. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable statutes.

Disclaimer

The information in this document is believed to be correct as of the date issued. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE. This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for his particular purpose and on the condition that he assumes the risk of this use thereof.

NOX-CRETE MANUFACTURING INC

Printed Using MSOS Generator™ 2000

Page 1

3980000 Date of preparation: 03/06/09

SECTION I

Manufacturer : W. R. MEADOWS, INC.

Address : 2300 West Valley Blvd.

: Pomona, CA 91768

Health Flammability Reactivity Personal Protection

-HMIS-

(Hazard Rating:0=Least,1=Slight,2=Moderate,3=High,4=Extreme,*=Chronic)

Telephone #

: (909) 469-2608

Emergency # : 1-800-424-9300 Chemtrec

: DIVISION 3 **Product Class** 3980000 Mfg. code I.D. FORM OIL Trade Name

SECTION II-A

HAZARDOUS COMPONENTS

% by

VAPOR PRESSURE

LEL

:11

:11

:01

No. Component

CAS# Weight 90-100 SARA

(mm Hg @ 20 C)

(@ 25 C)

1, #2 Fuel Oil

64741-44-2

NO

0.01

1.0

None of the components of this product are recognized as carcinogenic.

Under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372, chemicals listed on the 313 List (40 CFR Part 373.65) are identified under the heading "SARA 313".

SECTION II-B

OCCUPATIONAL EXPOSURE LIMITS

OSHA **ACGIH**

PEL/TWA PEL/CEILING **PEL/STEL** No.

SKIN TLV/TWA

TLV/STEL TLV/CEILING

SKIN NO

N/E N/E N/E N/E N/E N/E NO Skin absorption may contribute to the overall exposure to this material. Take appropriate measures to prevent skin contact.

N/E= Not Established

SECTION III

PHYSICAL DATA

Bolling Point : >350 degrees F. Evaporation Rate : < 1 (BuAc =1) : > 1 (air = 1)

% Volatile by volume % Volatile by weight Weight per gallon

100 (Theoretical) : N/E (Theoretical) 7.5 (Theoretical)

Vapor Density SECTION IV

HEALTH INFORMATION

EYE CONTACT: Based on the presence of components 1 this product may cause slight eye imitation. Corneal injury is unlikely.

SKIN CONTACT: Exposure may cause mild skin imitation. Prolonged or repeated contact may cause redness, drying, burning and cracking of the skin. Persons with pre-existing skin disorders my be more susceptible to the effects of this material. Based on the presence of component 1 prolonged or repeated contact may result in defatting and drying of the skin which may result in dermatitis.

INHALATION: Exposure may produce irritation to the nose, throat, respiratory tract, and other mucous membranes. Based on the presence of component 1 exposure to excessive vapor concentrations may cause signs of transient central nervous system depression. (e.g., headache, drowsiness, loss of coordination, and fatigue)

INGESTION: Ingestion may cause irritation of the gastrointestinal tract. Based on the presence of component 1 Ingestion may result in nausea, vomiting, diarrhea, and restlessness. Aspiration of vomitus into the lungs must be avoided as even small quantities in the lungs can produce chemical pneumonitis and pulmonary edema/hemorrhage.

SIGNS AND SYMPTOMS: Repeated excessive exposures may cause irritation of the eyes, nose and skin.

AGGRAVATED MEDICAL CONDITIONS: Pre-existing skin, eye, and respiratory disorders may be aggravated by exposure to this product.

OTHER HEALTH EFFECTS: From skin painting studies of petroleum distillates similar to component 1, it has been shown that these types of materials may demonstrate weak carcinogenic activity in laboratory animals. Therefore, there may be a potential risk of skin cancer from prolonged/repeated contact in the absence of good personal hygiene. During laboratory testing the material was not washed off between applications. Personal hygiene measures taken to prevent skin irritation are expected to be adequate to prevent the risk of skin cancer.

Date of preparation: 03/06/09

FORM OIL

3980000 Page 1

Page 2 3980000

Date of preparation: 03/06/09

SECTION V

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: If irritation or redness develops, move victim away from exposure source and into fresh air. Flush eyes with water for fifteen minutes. If symptoms persist, seek medical attention.

SKIN CONTACT: Remove contaminated shoes and clothing. Cleanse affected area(s) thoroughly by washing with mild soap and water. If imitation or redness develops and persists seek medical attention.

INHALATION: If respiratory symptoms develop, move victim away from exposure source and into fresh air, if symptoms persist, seek medical attention if victim is not breathing, immediately begin artificial respiration. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention.

INGESTION: Do not induce vomiting. Vomiting will cause further damage to the throat. Dilute by giving water or milk to drink if the victim is conscious. Consult a physician, hospital, or poison control center and/or transport to an emergency facility.

SECTION VI

FIRE AND EXPLOSION HAZARDS

FLAMMABILITY CLASSIFICATION

- NFPA: Combustible Liquid - Class IIIA

- DOT: Not regulated by DOT

FLASH POINT: > 200 degrees F (TCC).

EXTINGUISHING MEDIA: Use water fog, foam, dry chemical, or Carbon Dioxide.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS: Clear fire area of unprotected personnel. Do not enter confined fire space without helmet, face shield, bunker coat, gloves, rubber boots, and a positive pressure NIOSH approved setf-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Containers exposed to intense heat from fires should be cooled with water to prevent vapor pressure buildup which could result in container rupture. Container areas exposed to direct flame contact should be cooled with large quantities of water as needed to prevent weakening of container structure.

SECTION VII

REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS AND MATERIALS TO AVOID: Avoid exidizing materials and strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Combustion may yield Carbon Dioxide, Carbon Monoxide, and/or incomplete combustion products. Do not breathe smake or fumes. Wear appropriate protective equipment.

SECTION VIII

EMPLOYEE PROTECTION

RESPIRATORY PROTECTION: Use ventilation as required to control vapor concentrations - at least 10 air changes per hour are recommended for good general room ventilation. If exposure exceeds the PEL/TLV, use the appropriate NIOSH approved respirator.

PROTECTIVE CLOTHING: Wear safety glasses, goggles, or a splash shield to prevent eye contact. Contact lenses should not be worn. Wear appropriate gloves and protective clothing to prevent contact with skin and clothing.

ADDITIONAL PROTECTIVE MEASURES: Eye wash fountains and safety showers should be available for use in an emergency.

SECTION IX

ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES: LARGE SPILLS>> Evacuate the hazard area of unprotected personnel. Wear appropriate respirator and protective clothing. Shut off source of leak only if safe to do so. Dike and contain. Remove/extinguish ignition sources, if vapor cloud forms, water fog may be used to suppress; contain run-off. Remove with vacuum trucks or pump to storage/salvage vessels. Soak up residue with an absorbent such as clay, sand or other suitable material; place in non-leaking containers for proper disposal. Flush area with water to remove trace residue; dispose of flush solutions as above. SMALL SPILLS>> Take up with an absorbent material and place in non-leaking containers; seal tightly for proper disposal.

WASTE DISPOSAL: Observe all Federal, State and local regulations regarding proper disposal.

SECTION X

ADDITIONAL PRECAUTIONS

Keep liquid and vapor away from heat, sparks, and flame. Extinguish pilot lights, cigarettes, and turn off other possible sources of ignition prior to use and until vapors are gone. Surfaces that are sufficiently hot may ignite product in the absence of sparks or flame. Vapors may accumulate and travel to ignition sources distant from the handling site. Keep containers closed when not in use. Use with adequate ventilation. Containers, even if empty, can contain explosive vapors. Do not cut, drill, grind or weld near containers. Containers can contain hazardous product residues even when empty. Wash with soap and water before eating, drinking, smoking or using toilet facilities.

The information contained herein is based on the data available to us and is believed to be correct. However, we make no warranty, expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for injury from the use of the product described within.

Date of preparation: 03/06/09

FORM OIL

FORM-EZE NATURAL

BIODEGRADABLE, CONCRETE FORM RELEASE AGENT

DESCRIPTION

FORM-EZE NATURAL form release is an emulsion of natural, biodegradable oils that will minimize surface defects and provide a quick, easy release of concrete from forms. This environmentally friendly formula will not stain or discolor the surface of concrete. FORM-EZE NATURAL can be used on metal, wood and fiberglass forms.

PRIMARY APPLICATIONS

- · Used on metal, fiberglass or wood forms
- Used for hoist buckets, wheel barrows, and paving machinery
- Spray on tools and equipment to prevent build-up
- Concrete molds, overlaid plywood and fiberglass
- Spray on precast, prestressed, masonry block and tile forms

FEATURES/BENEFITS

- · Ali natural formula
- · Helps eliminate surface defects
- · Will not discolor the surface of concrete
- · Economical and easy to use

- · Safe to handle, safe to use
- Reduces clean-up cost while extending the life of the forms

TECHNICAL INFORMATION

Typical Engineering Data

 Freeze Point
 30°F (-1.1°C)

 Viscosity
 50 to 300 cps

 Specific Gravity
 0.959

 VOC Content
 0 g/L

 Pounds/gal
 8.0

Appearance: FORM-EZE NATURAL is a white emulsion.

PACKAGING

FORM-EZE NATURAL is packaged in 275 gal (1041 L) totes, 55 gallon (208 L) drums, and 5 gal (18.9 L) pails.

SHELF LIFE

1 year in original, unopened package.

COVERAGE

FORM-EZE NATURAL should be applied to the forms at the following rates:

Wood forms: 600 to 800 ft²/gal

(14,7 to 19.63 m²/L)

Metal forms: 800 to 1600 ft²/gal

(19.63 to 39.3 m²/L)

DIRECTIONS FOR USE

FORM-EZE NATURAL can be sprayed or rolled on the forms or machinery in thin, even layers for maximum performance and economy. For a more uniform and economical application, use a sprayer equipped with a fan type nozzle. Overspray and puddling should be wiped up immediately. Excess application of FORM-EZE NATURAL may cause "bugholes" or imperfections.

For best results, all surfaces should be completely free of old concrete. **NOTE**: Clean residual amounts of previous form release agents from forms or equipment using a degreaser.



The Euclid Chemical Company

19218 Redwood Rd. - Cleveland, OH 44110 Phone: [216] 531-9222 • Toll-tree: [800] 321-7628 • Fax: [216] 531-9596 www.euclidchemical.com





PRECAUTIONS/LIMITATIONS

- · Do not dilute.
- Protect from freezing; store at 30°F (-1.1°C) or above.
- · Always spray or roll thin, even layers.
- Do not use as a bond breaker for tilt-up construction.
- · Agitate before use.
- IMPORTANT: Clean all petroleum based form oil from forms before using FORM-EZE NATURAL.
- . In all cases, consult the Material Safety Data Sheet before use.

Rev. 10,09



FORM-EZE NATURAL - 275 GAL TOTE

Version 1

REVISION DATE: 05/24/2005

Print Date 11/29/2005

SECTION 1 - PRODUCT IDENTIFICATION

Trade name

: FORM-EZE NATURAL - 275 GAL TOTE

Product code

079T 27

COMPANY

: Euclid Chemical Company

19218 Redwood Road

Cleveland, OH 44110

Telephone

: 1-800-321-7628

Emergency Phone:

: U.S. only: 1-800-255-3924

International Users Call Collect: 1-813-248-0585

Product use

: Coating

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

White. Liquid solution. No serious effects anticipated under normal conditions of use. Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation

No serious effects anticipated under normal conditions of use.

Eyes

Direct contact may cause mild irritation.

Ingestion

May cause gastrointestinal irritation, nausea, and vomiting.

Skin

May cause mild irritation.

Aggravated Medical Conditions

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

Fillers are encapsulated and not expected to be released from product under normal conditions of use.

1/5

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %
Water	7732-18-5	40.0 - 70.0
Soy bean oil	8001-22-7	40.0 - 70.0
Proprietary	NJ TSRN# 51721300-5623P	1.0 - 5.0
Triethanolamine	102-71-6	1.0 - 5.0

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation

: Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get

medical attention.

An **RPITTI** Company

079**T.2**7



FORM-EZE NATURAL - 275 GAL TOTE

Version 1 REVISION DATE: 05/24/2005 Print Date 11/29/2005

Eye contact

: Flush with water for 15 minutes. If irritation persists, get medical attention.

Skin contact

: Wash area of contact thoroughly with hand cleaner followed by soap and water. If

irritation, rash or other disorders develop, get medical attention immediately.

Ingestion

Get medical attention. Do not induce vomiting.

Notes to physician

: Not applicable.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point

> 212 °F, > 100 °C

Method

Closed Cup

Lower explosion limit

Not available.

Upper explosion limit

Not available.

Autoignition temperature

Not available.

Extinguishing media

This product is not expected to burn under normal conditions of use.

Hazardous combustion

١ .

Carbon monoxide and carbon dioxide can form. Smoke, fumes.

products

Protective equipment for

firefighters

Use accepted fire fighting techniques. Wear full firefighting protective

clothing, including self-contained breathing apparatus (SCBA).

Fire and explosion conditions

This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Transfer to appropriate container for disposal. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Use appropriate protective equipment. Avoid contact with material.

SECTION 7 - HANDLING AND STORAGE

Handle in compliance with common hygienic practices. Clean hands thoroughly after handling. Keep from freezing. Do not use in confined or poorty ventilated areas. Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Store in sealed containers in a dry, ventilated warehouse location above freezing.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

Respiratory protection

 Not required under normal conditions of use. Wear appropriate, NIOSH/MSHA approved respirator with combination particulate filter and vapor/gas

removing cartridge when the ventilation is not adequate or if it is necessary to

abrade or grind surfaces coated with this product.

Hand protection

Use suitable impervious rubber or vinyl gloves and protective apparel to

reduce exposure.

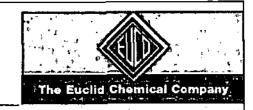
Eye protection

: Wear appropriate eye protection. Wear chemical safety goggles and/or face

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2/5

079T 27



FORM-EZE NATURAL - 275 GAL TOTE

Version 1

Print Date 11/29/2005

REVISION DATE: 05/24/2005

shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes with contaminated body parts or materials. Have eye washing facilities readily

available.

Skin and body protection

: Prevent contact with shoes and clothing. Use rubber apron and overshoes.

Protective measures

: Other equipment not normally required. Use professional judgment in the

selection, care, and use.

Engineering measures

Not required under normal conditions of use. Use local exhaust when the

general ventilation is inadequate.

Exposure Limits

Chemical Name	CAS Number	Regulation	<u>Limit</u>	<u>Form</u>	
Triethanolamine	102-71-6	ACGIH TWA:	5 mg/m3		

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form

: Liquid solution

Color

White

Odor

: Mild

рΗ

: 8.0 - 9.0 : Not available.

Vapour pressure Vapor density

: Heavier than air

Melting point/range

: Not available.

Freezing point

: Not available.

Boiling point/range

: 212 °F, 100 °C

Water solubility

: Dispersible

Specific Gravity

: 1

% Volatile Weight

: 50 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid

: Strong acids.Strong bases.

Stability

: Stable

Hazardous polymerization

: Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

Triethanolamine, CAS-No.: 102-71-6

Acute oral toxicity (LD-50 oral)

8,680 mg/kg (Rat)



FORM-EZE NATURAL - 275 GAL TOTE

Version 1

REVISION DATE: 05/24/2005

Print Date 11/29/2005

SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method

Waste not regulated under RCRA. Incinerate at EPA approved facility or dispose of waste in compliance with state and local regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:

NOT REGULATED

SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory.

This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components

None present or none present in regulated quantities.

SARA 311/312 Hazards

: Acute Health Hazard

OSHA Hazardous Components:

Triethanolamine

102-71-6

OSHA Status: Considered

hazardous based on the

following criteria:

: Irritant

: IIIB

OSHA Flammability

1

Regulatory VOC (less water and

: 0 g/t

exempt solvent)
VOC Method 310

: 0%

U.S. State Regulations:

MASS RTK Components

: Triethanolamine 102-71-6

Penn RTK Components

 Water
 7732-18-5

 Soy bean oil
 8001-22-7

Triethanolamine

102-71-6

NJ RTK Components

Water

7732-18-5

Soy bean oil

8001-22-7

Proprietary

NJ TSRN# 51721300-5623P

Triethanolamine

102-71-6



FORM-EZE NATURAL - 275 GAL TOTE

REVISION DATE: 05/24/2005

Print Date 11/29/2005

Chemicals known to the State of California to cause cancer birth defects and/or other reproductive harm: None known.

SECTION 16 - OTHER INFORMATION

HMIS Rating:

Health	1
Flammability	1
Reactivity	 i
PPE	+
	ļ

0 = Minimum

1 = Slight

2 = Moderate

3 = Serious

4 = Severe

Further information:

For Industrial Use Only, Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

ACGIH - American Conference of Governmental Hygienists

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

DOT - Department of Transportation

DSL - Domestic Substance List

EPA - Environmental Protection Agency

HMiS - Hazardous Materials Information System

IARC - International Agency for Research on Cancer

MSHA - Mine Safety Health Administration

NDSL - Non-Domestic Substance List

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Salety and Health Administration

PEL - Permissible Exposure Limit

RCRA - Resource Conservation and Recovery Act

RTK - Right To Know

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

V - Volume

VOC - Volatile Organic Compound

WHMIS - Workplace Hazardous Materials Information

System

FORMSHIELD® PURE

LOW VOC, OIL BASED CONCRETE FORM RELEASE

DESCRIPTION

FORMSHIELD PURE is a concrete form release agent with exceptional performance and ease of use that is unmatched by water based form release products. FORMSHIELD PURE has a unique crystal clear formulation containing a proprietary ingredient that provides release capability superior to traditional form oils. FORMSHIELD PURE is environmentally friendly and compliant with all VOC regulations in the U.S. and Canada. Because it is not water based, pails, drums, or totes of FORMSHIELD PURE do not require protection from freezing. Forms treated with FORMSHIELD PURE can be put to use faster than those treated with water based release products. Metal, plastic, wood and composition forms strip cleanly with FORMSHIELD PURE.

PRIMARY APPLICATION

· Preventing the adhesion of concrete to forms of all types

FEATURES/BENEFITS

- · Forms release easily and cleanly from concrete
- No staining
- Compliant with all VOC regulations, including Federal EPA, OTC, LADCO, Maricopa County, CARB, and SCAQMD
- Dramatically reduces the occurrence of voids and bugholes
- Tolerant to freezing conditions during storage and transportation
- Treated forms are ready for use quickly
- DOT non-regulated: easy storage and shipping
- · Very low odor
- Reduces the need for heavy prying tools that can cause concrete and form damage

TECHNICAL INFORMATION

PACKAGING

FORMSHIELD PURE is packaged in 275 gallon (1041 L) totes, 55 gal (208 L) drums and 5 gal (18.9 L) pails.

SHELF LIFE

2 years in original, unopened container.

SPECIFICATIONS/COMPLIANCES

- Corp of Engineers CE 1401.01 (17.4) & CW 03101 (5.3)
- GSA CE 204 (3-03-K)
- ACI 347-68
- · Compliant with Federal, OTC, California, and Maricopa County regulations

COVERAGE

Plywood Forms Wood Composition Forms Plastic Forms

Metal Forms

ft²/gal (m²/L) 350 to 500 (8.59 to 12.27)

350 to 500 (8.59 to 12.27) 800 to 1000 (19.63 to 24.54) 800 to 1000 (19.63 to 24.54)

Note: Coverage rates are approximate and for estimating purposes only. Surface temperature, porosity and texture will determine actual material requirements.



The Euclid Chemical Company

19218 Redwood Rd. - Cieveland, OH 44110 Phone: [216] 531-9222 - Toll-free; [800] 321-7628 - Fax: [216] 531-9596 www.euclidchemical.com





DIRECTIONS FOR USE

Surface Preparation: The form surface must be free from dirt, cement paste, hardened concrete and other residue that could transfer to the finished concrete surface. Before coating plywood forms, apply a heavy brush coat to the plywood edges to protect laminations.

Application: In cold weather or if FORMSHIELD PURE has been stored in a cold location, gently stir the product before using. FORMSHIELD PURE can be applied by brush, spray or roller. Apply in a continuous film, avoiding excessive buildup, runs and puddles. Forms treated with FORMSHIELD PURE will be ready to use within one hour on plywood and 2 to 3 hours on metal and plastic forms. Used forms can be re-coated with FORMSHIELD PURE if proper surface preparation techniques are followed.

CLEAN-UP

Clean tools and application equipment immediately after use with mineral spirits. Clean drips and overspray while still wet.

PRECAUTIONS/LIMITATIONS

- . Do not thin or dilute FORMSHIELD PURE.
- The viscosity of FORMSHIELD PURE increases at low temperatures, resulting in reduced sprayability.
- In all cases, consult the Material Safety Data Sheet before use.



FORMSHIELD PURE

Version 2.

Acres 64

REVISION DATE: 04/27/2010

Print Date 12/01/2010

SECTION 1 - PRODUCT IDENTIFICATION

Trade name

: FORMSHIELD PURE

Product code

: THFSD55

COMPANY

: Euclid Chemical Company

19218 Redwood Road Cleveland, OH 44110

Telephone

: 1-800-321-7628

Emergency Phone:

: U.S. only: 1-800-424-9300

International Users Call Collect: 1-703-527-3887

Product use

: Coating

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview

Amber, Liquid. No serious effects anticipated under normal conditions of use. Leave area to breathe fresh air. Avoid further overexposure, if symptoms persist, get medical attention.

Acute Potential Health Effects/ Routes of Entry

Inhalation

No serious effects anticipated under normal conditions of use.

Eyes

Direct contact may cause mild imitation.

Ingestion

May cause gastrointestinal imitation, nausea, and vorniting.

Skin

May cause mild imitation.

Aggravated Medical Conditions

Pre-existing eye, skin and respiratory disorders may be aggravated by exposure.

Chronic Health Effects

Fillers are encapsulated and not expected to be released from product under normal conditions of use. Prolonged or repeated exposure to mineral spirits (petroleum naphtha or stoddard solvent) may cause defatting, drying, and irritation of the skin, dermatitis, central nervous system (CNS) effects, and adverse liver, kidney, and lung effects.

SECTION 3 - PRODUCT COMPOSITION

Chemical Name	CAS-No.	Weight %	
Distillates, petroleum, hydrotreated middle	64742-46-7	> 60.0	
Petrolatum Tall oil fatty acids	8009-03-8 61790-12-3	1.0 - 5.0 1.0 - 5.0	

SECTION 4 - FIRST AID MEASURES

Get immediate medical attention for any significant overexposure.

Inhalation

: Leave area to breathe fresh air. Avoid further overexposure. If symptoms persist, get

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medical attention.

Eye contact

: Flush with water for 15 minutes. If irritation persists, get medical attention.

Skin contact

Wash area of contact thoroughly with hand cleaner followed by soap and water. If

irritation, rash or other disorders develop, get medical attention immediately.

Ingestion

: Get medical attention. Do not induce vomiting.

Notes to physician

Not applicable.

SECTION 5 - FIRE FIGHTING MEASURES

Flash point

> 200 °F, > 93 °C

Method

Not available.

Lower explosion limit

Not available.

Upper explosion limit

Not available.

Autoignition temperature

Not available.

Extinguishing media

This product is not expected to burn under normal conditions of use.

Hazardous combustion

Carbon monoxide and carbon dioxide can form. Smoke, fumes.

products

Protective equipment for

firefighters

Use accepted fire fighting techniques. Wear full firefighting protective

clothing, including self-contained breathing apparatus (SCBA).

Fire and explosion conditions

This product not expected to ignite under normal conditions of use.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Transfer to appropriate container for disposal. Stop flow. Contain spill. Keep out of water courses. Absorb spill in sand, earth or other suitable material. Transfer to appropriate container for disposal. Use appropriate protective equipment. Avoid contact with material.

SECTION 7 - HANDLING AND STORAGE

Handle in compliance with common hygienic practices. Clean hands thoroughly after handling. Keep from freezing. Do not use in confined or poorly vertilated areas. Prevent inhalation of vapor, ingestion, and contact with skin eyes and clothing. Keep container closed when not in use. Precautions also apply to emptied containers. Store in sealed containers in a dry, vertilated warehouse location above freezing.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protection equipment

Respiratory protection :

Not required under normal conditions of use. Wear appropriate, NIOSH/MSHA

approved respirator with combination particulate filter and vapor/gas

removing cartridge when the ventilation is not adequate or if it is necessary to

abrade or grind surfaces coated with this product.

Hand protection

Use suitable impervious rubber or vinyl gloves and protective apparel to

reduce exposure.

Eye protection

Wear appropriate eye protection. Wear chemical safety goggles and/or face shield to prevent eye contact. Do not wear contact lenses. Do not touch eyes

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with contaminated body parts or materials. Have eye washing facilities readily

available.

Skin and body protection

: Prevent contact with shoes and clothing. Use rubber apron and overshoes.

Protective measures

Other equipment not normally required. Use professional judgment in the

selection, care, and use.

Engineering measures

Not required under normal conditions of use. Use local exhaust when the

general ventilation is inadequate.

Exposure Limits

No known components with exposure limits.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Form

: Liquid

Color

: Amber

Odor

: Hydrocarbon

pΗ

: Not available.

Vapour pressure

: Not available.

Vapor density

: Heavier than air

Melting point/range

: Not available.

Freezing point

: Not available.

Boiling point/range

: 590 - 680 °F, 310 - 360 °C

Water solubility

: Soluble

Specific Gravity

: 0.87

% Volatile Weight

: 0.0 %

SECTION 10 - REACTIVITY / STABILITY

Substances to avoid

: Strong acids.Strong bases.

Stability

Stable

Hazardous polymerization

Will not occur.

SECTION 11 - TOXICOLOGICAL INFORMATION

No Data Available



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SECTION 12 - ECOLOGICAL INFORMATION

No Data Available

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal Method

Waste not regulated under RCRA. Dispose of in compliance with state and local

regulations.

SECTION 14 - TRANSPORTATION / SHIPPING DATA

TDG / DOT Shipping Description:

NOT REGULATED

SECTION 15 - REGULATORY INFORMATION

North American Inventories:

All components are listed or exempt from the TSCA inventory.

This product or its components are listed on, or exempt from the Canadian Domestic Substances List.

U.S. Federal Regulations:

SARA 313 Components

None present or none present in regulated quantities.

SARA 311/312 Hazards

: Acute Health Hazard

OSHA Hazardous Components:

OSHA Status: Considered hazardous based on the

: Irritant

following criteria:

OSHA Flammability

: Not Regulated

Regulatory VOC (less water and

: 0 g/l

exempt solvent) VOC Method 310

: 0%

U.S. State Regulations:

Penn RTK Components

: Distillates, petroleum, hydrotreated

64742-46-7

middle

NJ RTK Components

: Distillates, petroleum, hydrotreated

64742-46-7

middle

Petrolatum

8009-03-8

Tall oil fatty acids

61790-12-3

Components under California Proposition 65:

None known.



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SECTION 16 - OTHER INFORMATION

HMIS Rating:

Health	1
Flammability	1
Reactivity	0
PPE	T

0 = Minimum

1 = Slight

2 = Moderate

3 = Serious

4 = Severe

Further information:

For Industrial Use Only, Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.

Prepared by: Rich Mikol

Legend

ACGIH - American Conference of Governmental Hygienists

CERCLA - Compreh ensive Environmental Response, Compensation, and Liability Act

DOT - Department of Transportation

DSL - Domestic Substance List

EPA - Environmental Protection Agency

HMIS - Hazardous Materials Information System

IARC - International Agency for Research on Cancer

MSHA - Mine Safety Health Administration

NDSt. - Non-Domestic Substance List

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PEL - Permissible Exposure Limit

RCRA - Resource Conservation and Recovery Act

RTK - Right To Know

SARA - Superfund Amendments and Reauthorization Act

STEL - Short Term Exposure Limit

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act

TWA - Time Weighted Average

V - Volume

VOC - Volatile Organic Compound

WHMIS - Workplace Hazardous Materials Information

System