



Release Agents

Form Treatments ■ Cures and Seals



INNOVATIVE

ECO-RESPONSIBLE

PERFORMANCE

Cresset

PRODUCTS FOR

CONCRETE

STRUCTURAL AND HIGH VISUAL IMPACT RESULTS

FOR CONCRETE INFRASTRUCTURE PROJECTS



Natchez Trace Parkway Bridge
(Tennessee USA)
Designer: FIGG Engineering Group
Release Agent: Cresset Crete-Lease

Release Agents Structural/Architectural

Why Use -Xtra?

- **-XTRA:** -XTRA includes green technology enhancements to original products, avoids mandatory HazMat regulations (no CDL HazMat endorsement and no HazMat employee training required), increased storage and improved fragrance. Only improves the flash point. All other properties, including price, remain the same as the original versions.
- **-XTRA WITH POLY-RELEASE®:** Poly-Release improves form stripping even for modern mixes with SCC, fly ash, etc. Helps produce the best bughole-free surfaces ever, especially when using w/c ratios below 0.45.

Common Characteristics Crete-Lease® Release Agents

- Increase surface durability
 - Promote clean stripping and stain-free surfaces
 - Eliminate concrete build-up
 - Slash labor costs of form clean-up
 - Spray on forms minutes or days before placing concrete
 - Are non-carcinogenic
 - Do not contain diesel oil
 - Will not wash off in a moderate rain
 - Will not stain or transfer to hardened concrete surface
 - Permit hardened concrete to accept coatings, paint, caulk, etc.
 - Permit empty container disposal in non-hazardous landfills
 - Do not require reporting under SARA 313 (Community Right to Know)
 - Apply easily, even in sub-freezing temperatures*
 - Long shelf life*
- *Except Crete-Lease 20-VOC and Crete-Lease Bond Breaker

Crete-Lease contributes to LEED points, exceed Federal VOC and the more restrictive California and OTC regulations.

Available formulations:

727 -XTRA

Please read enhancement info above to learn about the benefits of -XTRA and -XTRA WITH POLY-RELEASE

727 -XTRA WITH POLY-RELEASE

- Strips clean with green concrete and sticky mixes
- Is excellent for modern complex mixes, i.e. w/c ratios below 0.45



- Produces both high visual impact (CCS 2) and typical concrete surfaces (CCS 3, CCS 4, CCS 5)
- Cuts form clean-up time up to 70% when properly applied
- Is excellent on aluminum forms
- Does not interfere with adhesion of caulk, architectural coatings, paint, sealers and curing compounds on cured concrete surfaces when properly applied
- Can be applied in sub-freezing to very hot temperatures

Available formulations:

880-VOC -XTRA

Please read enhancement info above to learn about the benefits of -XTRA and -XTRA WITH POLY-RELEASE

880-VOC -XTRA WITH POLY-RELEASE

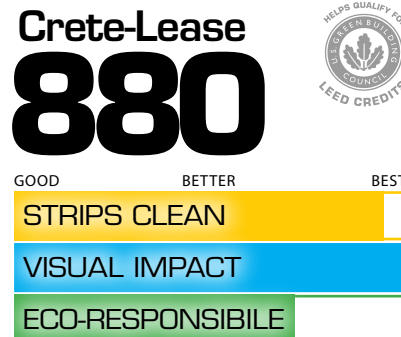
- Helps produce the best bughole-free surfaces
- Improves stripping especially when using w/c ratios below 0.45



- Produces high visual impact (CCS 1) concrete surfaces
- Promotes longer form life by acting as a water repellent from inside the wood
- Does not stain or stick from steam curing
- Allows storage of higher quantities, avoids HazMat training and bypasses need for CDL HazMat endorsements

Available formulation:

880 - The Original



- Produces high visual impact (CCS 1 or CCS 2) concrete surfaces
- Is the lowest viscosity release agent available
- Eliminates bugholes — even with superplasticized concrete
- Promotes easy stripping, especially when applied in an ultra-thin film
- Is non-staining
- Can be applied in sub-freezing or very hot temperatures
- Helps minimize clean-up of equipment, including concrete buckets and mixers





Release Agents Specific Purpose

Crete-Lease 20^{VOC} -XTRA RELEASE AGENT



- Reproduces any formliner's surface from smooth to highly detailed
- Water-based
- Use on any form or formliner, including foamed polystyrene
- Will not degrade foam formliners
- Exceeds rigid environmental regulations

Crete-Lease 810^{-XTRA} RELEASE AGENT



- Heavy bodied, excellent for:
 - machine-made pipe
 - header rings
 - pipe pallets
 - cast iron forms
- Does not interfere with bonding of:
 - joint sealants
 - gaskets
 - coatings
 - caulking

Crete-Lease Bond Breaker^{-XTRA} FOR TILT-UP



- Makes release easy for tilt wall and stack-cast concrete construction projects
- Is water-based and meets VOC regulations
- Is non-staining
- Shows temporary blue color where product is applied

Bio-Tru[®] WITH POLY-RELEASE[®] RELEASE AGENT

Bio-Tru-All[®] WITH POLY-RELEASE[®] RELEASE AGENT

- Helps produce the best bughole-free surfaces
- Improves stripping, especially when using w/c ratios below 0.45
- Meets ASTM biodegradability requirements

- Is the most environmentally complete and technically proficient release agent for the site cast and precast concrete construction industries
- Can be used in weather as cold as 15° F
- Is the best 100% vegetable-based release agent for high visual impact (architectural) surfaces
- Is 100% biodegradable

Super-Strip[®] 65 FORM RELEASER

- Helps minimize clean-up of forms and equipment
- Promotes easy form stripping
- Helps reduce formation of bugholes on concrete surfaces
- Is good on aluminum forms
- Can be applied in temperatures from cold to very hot

Super-Strip 65 Form Releaser permits removal of forms, formliners and pallets from hardened concrete. Intended for use where a CCS 4 or CCS 5 surface is acceptable. It is a proprietary blend of vegetable oils in mineral oils.

Limitations: Not recommended for forms or formliners made from expanded/extruded polystyrene, SBR, or natural rubber or latexes made of these.



If you have a "green" project, your product choices will have an impact on your LEED qualification.

The use of Cresset Crete-Lease release agents and Cresset Bio-Tru release agents can help a building qualify for more LEED points through these key areas:

- Sustainability
- Efficient use of resources
- Biodegradability
- Recycled content
- Proximity

Your Cresset rep can discuss ways for you to increase your profit margins with a more efficient application of the right Cresset release agent for your project — saving you time and money.

Super-Strip AquaBlend FORM RELEASER

- Is water-soluble oil concentrate, dilutes with 4 parts water
- Is economical and for general purpose use
- Exceeds Federal VOC and the more restrictive California and OTC regulations

Summary of Properties of Popular Cresset Products

Crete-Lease Release Agents

Application	727 -XTRA	880-VOC -XTRA	880	20-VOC -XTRA	Bio-Tru -XTRA	Bio-Tru-All -XTRA	810 -XTRA	Bond Breaker -XTRA
	Architectural / Prestress / Precast / Site Cast						Pipe	Tilt-Up
Chemically Active ^①	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Flash Point (°F)	220	220	125	NA	220	210	260	NA
Freeze Damage	No	No	No	Yes	No	No	No	Separates
Color	Straw	Straw	Straw	White	Straw	Straw	Straw	Light Blue
VOC (g/L)	245	240	440	160	80	5	145	2
(lbs/gal)	7.37	7.37	7.0	7.8	7.14	7.0	7.52	8.4
Coverage (sq ft/gal)	1,000 - 2,000						900	200
Cost (\$/sq ft)	0.004						0.01	0.06

Effect On Concrete Surfaces

Non-Dusting ^②	Slight	Yes	Yes	Yes	Yes	Yes	Slight	Yes
Paintable Surface ^③	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Non-Staining	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Compatible with Admixtures	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Form/Formliner Compatibility

ABS, PVC, FRP (Fiberglass)	Better	Best	Best	Best	Best	Best	Good	NA
Regular and Oiled Plywood	Best	Better	Good	Better	Best	Best	Good	NA
Overlaid Plywood	Better	Best	Better	Best	Best	Best	Good	NA
Steel	Better	Best	Best	Better	Best	Best	Good	NA
Aluminum	Best	Better	Good	Better	Better	Better	Good	NA
Foamed Polystyrene	No	No	No	Better	No	No	No	NA
Epoxies and Urethanes	Better	Best	Best	Best	Best	Best	Good	NA
Natural Rubber and SBR	No	No	No	Better	No	No	No	NA

Notes

- ① Chemically active means that the ingredients combine with the calcium from the fresh cement paste.
- ② When applied at a film thickness of 0.001 inch or less.
- ③ A paintable surface does not require removal of the release agent, though cleaning may be required to remove other foreign matter.

Cresset.com/Products

The latest info and reference materials including:

Spec Sheets • MSDS • Properties Charts • CCS Guide



Other Products

Cures/Seals/Etc.

	Crete-Trete 309-VOC	Super-Trete 110-VOC	Super-Trete 115	Crete-Trete 400
Application	High Solids Cure & Seal	Low Solids Cure & Seal	Matte Finish of 110	For Desert Curing
Color	White	White	White	White
Opacity	Opaque	Opaque	Opaque	Opaque
Flash Point (°F)	NA	NA	NA	NA
Freeze Damage	Do Not Freeze	Do Not Freeze	Do Not Freeze	Do Not Freeze
Storage Life	8 Months	8 Months	8 Months	8 Months
VOC (g/L)	250	130	125	350
(lbs/gal)	8.45	8.44	8.4	8.45
pH ^④	8.2	8	8	8.5
Solids %	26	13	16	36
Resin	Acrylic	Acrylic	Acrylic	Acrylic
Tack Free (minutes)	45	50	50	45
Coverage (sq ft/gal)	600	300	300	250
Cost (\$/sq ft)	0.05	0.05	0.06	0.10

Form Treatments

	Spatter-Cote 100-XTRA	Store-Cote RP-6-XTRA	Form Cleaner 240	Break In
Application	Clean Screens, Outside of Forms, Etc.	Prevents Rust	Removes Rust	Conditions Aluminum
Color	Amber	Straw	Purple	Straw
Opacity	Clear	Clear	Clear	Clear
Flash Point (°F)	210	250	NA	NA
Freeze Damage	None	None	Do Not Freeze	Remix
Storage Life	1 Year	1 Year	1 Year	1 Year
VOC (g/L)	245	145	NA	20
(lbs/gal)	7.2	7.45	9.5	8.4
Coverage (sq ft/gal)	1,500	800	800	250
Cost (\$/sq ft)	0.02	0.02	0.06	0.05

Notes

- ④ The total pH scale varies from 1 to 14. Both extremes are very, very corrosive. Neutral is pH 7.0 (e.g. pure distilled water). Other examples of typical pH values include: muriatic acid (stomach acid) = 1.0; milk = 6.6; rain water = 6.6 to 7.4; drinking water = 6.6 to 8.0; blood = 7.4; Han•D = 7.4; lime water = 12.4; fresh concrete = 12.0 to 13.0; and caustic soda (lye) = 14.0.

Choose Your CCS Surface Before You Pour

What Is CCS?

CCS (Cresset Concrete Standards) is our copyrighted photographic guide that helps you specify high quality, architectural concrete surfaces. The CCS system fills the need for consistent, uniform descriptions of concrete surfaces.

You can use CCS with a camera phone, to remotely verify the visual impact of a hardened concrete surface.

The CCS guide can be invaluable when writing contract documents and specifications. Use CCS to indicate the quality expectation for each concrete surface in a project, by specifying the CCS number and providing the CCS visual reference.

FREE CCS Photographic Guide, and 3-part Performance Specification for Release Agents is available at Cresset.com/Products.

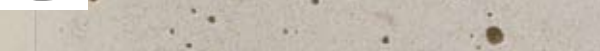
CCS 1 \$0.002 per sq ft*
Applied at <0.0005 in thick




CCS 2 \$0.006 per sq ft*
Applied at 0.001 in thick




CCS 3 \$0.01 per sq ft*
Applied at 0.002 in thick



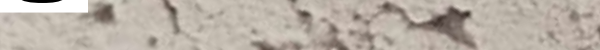
CCS 4 \$0.02 per sq ft*
Applied at 0.003 in thick



CCS 5 \$0.03 per sq ft*
Applied at 0.004 in thick



CCS 6 \$0.04 per sq ft*
Applied at 0.010 in thick



*Estimated cost per sq ft

Scale 1:1

Form Treatments

Product Highlights:

- Cresset offers several "unique" Form Treatment products
- Helps precasters and contractors address the HUGE waste of operation expenses from "non-revenue" generating labor to keep forms and equipment in working order

Spatter-Cote® 100-XTRA Concrete Spatter Protection

- Washes away concrete spatter without high pressure spraying
- Keeps tools and equipment clean and in good working order
- Is available in an aerosol spray can

A quick, easy and inexpensive way to keep unsightly, unwanted concrete spatter from building up on forms, vibrating screeds, dry mixers, scaffolds, and equipment. Simply spray it on prior to placing concrete; hose off spatter afterward. Excellent for use on ready mix trucks, outside of chutes, outside of forms, power trowels, concrete trailer rentals, etc. Recommended for daily preventative maintenance.

Store-Cote® RP-6-XTRA Rust Preventative

- Protects steel forms and equipment against rust and corrosion for up to 6 months
 - Does not harden or gel
 - Does not require removal before using forms or equipment
 - Is available in an aerosol spray can
- Protects steel forms, equipment, and tools during storage; plus makes a tight barrier against moisture and water vapor. Store-Cote need not be removed before reusing any equipment. Provides 6 to 8 months protection depending on severity of weather. Coverage is 800 square feet per gallon.

Form Cleaner 240 Rust Remover

- Removes rust and concrete buildup on steel forms or equipment
- Should be used before pouring concrete or painting

Crete-Lease Break-In Aluminum Form Conditioner

- Is non-flammable and solventless
 - Is water-based
 - Is VOC compliant
- Conditions surfaces of new aluminum forms before their first use with fresh concrete. It "seasons" or oxidizes the aluminum surface to help prevent concrete from sticking.

Cures & Seals

All Cresset Cures and Seals are ASTM 309 and AASHTO M 148 Type 1 and Type1-D (Class B) curing compounds for fresh concrete, and exceed California SCAQMD VOC rule 1113. As sealers, they help prevent liquid soils and salt water from soaking into concrete, allowing for easy floor cleaning. They also prevent concrete dusting and CO₂ concrete reactions.

Product Highlights:

- Bond to fresh concrete better than solvent based cures
- Combine physically with concrete surface matrix
- Made with water-based acrylic resins
- Help you apply a uniform film; appear white when wet, then dry clear



Crete-Trete® 309-VOC

- Covers 400 sq ft/gal for curing
- Covers up to 600 sq ft/gal as sealer

Crete-Trete 400 Anti-Check Cure

- Applies at rate of 200-300 sq ft/gal for curing
- Is for use in desert-like climates
- Prevents "checking" of surface

Super-Trete® 110-VOC

- Covers 200 sq ft/gal for curing
- Covers up to 400 sq ft/gal as sealer

Super-Trete 115 Matte Sealer

- Is the matte finish version of Super-Trete 110-VOC
- Covers 200 to 400 sq ft/gal



Spray Application Equipment

FORM SPRAYERS



RovR® 5860 Compressed Air

- Applies release agents at more than 2,000 square feet per gallon

- Applies Crete-Lease Release Agents in an ultra-thin film (0.005 inch)
- Encourages reduced use of release agents; saves money and promotes better concrete surfaces
- Provides up to 125 psi spray pressure
- ASME tanks
 - Air pressure tank rated 200 psi and liquid tank rated 150 psi
- Is portable — push or pull
- Manually pick up and carry holding tank with release agent for easier access to hard-to-reach places



5850-A 120 VAC Heavy Duty

- Develops 70 psi with a very low flow rate to better produce architectural concrete surfaces

- Has a pressure control switch that automatically shuts off when pump discharge valve is closed
- Provides excellent range with a 50 foot reinforced hose
- Applies release agent in a thin, uniform film to help produce architectural quality concrete; ideal for job sites and precast plants
- Sprays over 2,000 square feet per gallon; helps reduce waste and over-application
- Is portable for field use; mounts on truck bed, wall or drum
- Operates up to 10 spray stations

5850-B 120 VAC Heavy Duty

- Has the same features as 5850-A except has no automatic shutoff — release agent is recycled back to drum



Fine Spray For Thin Application
Cresset form sprayers produce a fine atomization to help reduce over-application of product, eliminating waste and saving you money.



5830 Manual Sprayer

- Complete with:
 - 2 gal stainless steel tank
 - 48 inch hose, plus 18 inch brass extension
 - Choice of three fan tips
- Designed to apply release agent in an ultra-thin film

Hand Protection Industry Proven For Over 60 Years

Concrete is easy to work with, but tough on hands. Cresset developed Han•D Hand Cleaner to help workers handling cement, lime, grease and oils which cause dry, cracked, irritated hands and skin. Han•D Hand Cleaner is fortified with lotions and antiseptics to promote healing. Han•D is recognized as the only pH neutral hand cleaner on the market that also can be used for spot removal and:

- cleaning of vinyl and leather
- removal of battery acid, aerosol paints, toners, felt tip pen marks
- elimination of residues from undercoating, gasket sealing, and more

Han•D will not separate even if frozen. Its indefinite storage life means you can keep it in your tool box, glove box, tackle box — anywhere at work, home or vehicle. It will be ready for you when you need it and won't lose its effectiveness.

Han•D is available in several sizes:

- easy to carry 8 oz flip-top
- half-gallon with convenient pump dispenser

“The best way to avoid skin irritation is to wash frequently with pH neutral soap and clean water.”
- Portland Cement Association Recommendation for Working Safely with Concrete



Han•D® Heavy Duty Hand Cleaner

- Moisturizes dry, cement-sore hands
- Is the only pH neutral hand cleaner in the market
- Reduces concrete dermatitis, resulting in fewer OSHA 300 Incident Reports
- Removes cement and cement-grease combinations
- Can be used as a spot remover for clothes, vinyl upholstery, table tops, felt-tip ink marks, etc.

SOL-ZOL Hand Cleaner

- Lotions dry, work-sore skin
- Removes soils containing cement, lime, gypsum, plaster and grease
- Keeps skin smooth; stores indefinitely



ABOUT CRESSET CHEMICAL:

Cresset has served the concrete industry for over half a century by helping you specify and produce good-looking concrete surfaces. We continue to lead through the development of eco-responsible, innovative, new products and services, including:

- Full Line of Release Agents to meet aesthetic, environmental, LEED and traditional needs.
- Drums and MegaPaks designed for reconditioning to save on disposal costs.
- Convenient aerosol can packaging available for popular products.
- CCS Guide — a photographic guide to help you specify architectural concrete surfaces. CCS includes six different appearance standards.
- Complete line of chemical products to serve the concrete industry.

Eco-responsible since 1946, Cresset remains committed to producing products that do not harm any part of the environment — the air, water, and earth on which we all live.

Product Availability

Crete-Lease Release Agents and other Cresset products are packaged in a variety of environmentally friendly containers that are both recyclable and are virtually 100% drainable. Environmentally responsible products are shipped in 275 gallon MegaPaks, 55 gallon plastic drums, 5 gallon pails and 1 gallon bottles.

The Cresset MegaPak® is 275 gallon polyethylene (HDPE) shipping container (the equivalent to five 55 gallon drums). Secured to a pallet, MegaPaks double stack to save floor space and reduce handling time. Bottom valve allows you to use almost every drop. When empty, it's not classified as hazardous waste. You can recondition, recycle or dispose of the MegaPak container. MegaPaks eliminate the trouble of returning or disposing of drums.

Crete-Lease Release Agents are also available in our familiar orange and white striped 55 gallon HDPE drums, and both 5 and 1 gallon containers.

Technical and Related Literature

Cresset publishes technical brochures, specification sheets, material safety data sheets and newsletters. The Cresset CCS Guide (the photographic guide to specifying concrete) is invaluable to many in the industry. All literature is free and also available at Cresset.com/Products.

Technical Support

Our technical support includes assistance in optimizing concrete mixtures for achieving architectural surfaces, release agent compatibility with superplasticizers, coatings, form facings, etc., and solving other concrete surface blemish problems including application advice.

Fast Answers

We are ready to answer your technical inquiries. Responses via email or fax (usually within 2 business hours) are available to requests for specification sheets and MSDS. Or call toll-free from within the US or Canada and our support staff will answer your questions during business hours.



Distributors for Cresset Chemical Company are located in the USA, Canada, and selected worldwide locations.

For details on prices and delivery, contact us to locate your nearest distributor.



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