

DESCRIPTION:

The Premera CW-VB one-step application process decontaminates surfaces at the molecular level, eliminating visually undetectable levels of highly corrosive substances, providing a uniform receptive surface prior to coatings application. The result is that protective coatings are more durable, more corrosion resistant and, therefore, substantially less likely to require frequent maintenance cycles - in other words; assets last longer and cost less to maintain. Premera CW is simple, safe and straightforward.

Premera CW-VB is a surface preparation product guaranteed to improve coating adhesion and mitigate under-film corrosion. Apply Premera CW-VB to metal assets or components to remove impurities in one step. Premera CW-VB will double the time between significant coating failure maintenance events and works with any coating system to create a uniform receptive surface for improved adhesion and consistent, optimized coating performance.

FEATURES:

- ✓ Achieve the ultimate visual and microscopically clean metal in minutes
- ✓ Stop flash rust and prevent corrosion under coatings well into the future
- ✓ will double the time between significant coating failure maintenance events
- ✓ Works with any coating system
- Removes even strongly bonded microscopic traces of: visible and nonvisible corrosion generators, Ionically-bonded iron chlorides, sulphates, and nitrates, Metabolic by-products of sulphate-reducing bacteria that create Microbiologically Influenced Corrosion (aka iron sulphide), Chemical and biological contaminants
- ✓ Leaves pH neutral surface
- ✓ Fast drying
- ✓ Not an inhibitor
- ✓ Not a film former
- ✓ No residue
- ✓ Biodegradable

TYPICAL USES:

- Prior to Protective Coating for use anywhere a protective coating will be applied to a metal substrate and extended coating performance is desirable. Coatings applied over a CW cleaned surfaces significantly outperform and extend coating service life when compared to coatings applied over substrates prepared according to conventional surface preparation standards. CW does not leave any residue and is not film-former; it can be used with any coating system.
- ➢ Before and After Welding –CW improves welding by removing contaminants that negatively affect puddling and weld porosity. CW also cleans weld flame residue and other surface contamination after welds have cooled.
- New Construction / Fabrication –CW expedites new steel construction by aiding in the removal of mill scale so that blasting time and blast media usage can be minimized.
- In Drinking water and sewer systems, Motor vehicles, Defense, Highway and railway bridges, Gas and liquid transmission pipelines, Waterways and ports, Hazardous materials storage and transport, Airports, Gas distribution, Electrical utilities, Telecommunication, Ships, aircraft, railroads, Oil and gas exploration and production, Mining, Petroleum refining, Chemical, petrochemical, and pharmaceutical, Pulp and paper, Agricultural, Food processing, Manufacturing, Nuclear waste storage



^{**}Note - Premera CW may be applied before or after oxidation of the steel occurs. Contact NCSI for further information.

PREMERA CW- VB



PACKAGING:

Available in 1-gallon jugs, 5-gallon pails, 55-gallon drums, and 275-gallon totes. Weight: 8.1 lbs. per gallon. Each 5-gallon container of Premera CW-VB CONCENTRATE makes 500 gallons of useable product when properly mixed with activated carbon filtered or chlorine free water.

COLOR:

Amber to straw liquid

COVERAGE:

WAB/WAVB: 15-20 US gallons per hour per nozzle of properly mixed Premera CW-VB. Be sure to allow for normal loss factors during mixing, handling and application when estimating practical coverage. Theoretical coverage rate: 100 ft2 to 150 ft2 per nozzle hour.

Note: Production rates may vary depending on what interference materials are being removed or the level of cleanliness specified.

POWER WASHING: 240-300 US gallons per hour per nozzle of properly mixed Premera CW-VB. Be sure to allow for normal loss factors during mixing, handling and application when estimating practical coverage. Theoretical coverage rate: 750 ft2 per nozzle hour

UHP (**Ultra High Pressure**): 600 gallons per hour per nozzle. Be sure to allow for normal loss factors during mixing, handling and application when estimating practical coverage. Theoretical coverage rate: TBD (to be determined)

STORAGE:

Twenty-four months in factory delivered, unopened containers. Keep container tightly closed. Store in cool, dry conditions, away from foodstuffs, oxidizing agents and acidic materials and in well-ventilated area. Store locked up; keep out of reach of children.

PROCESSING PROPERTIES (Under standard lab conditions)	
	2 quarts per 50 gallons
Mix Ratio	(1-gallon CW-VB:100-gallon Water)
	Each 1-gallon container of Premera CW-VB CONCENTRATE makes 100 gallons of useable product when properly mixed with activated carbon filtered or chlorine free water.
Pot life	2 to 5 days after mixing with water
Shelf Life	24 months in unopened original containers, when stored under 100° F(38°C)



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PREMERA CW- VB



MIXING:

For optimum performance add Premera CW-VB to activated carbon filtered or chlorine free water, 1:100 ratio. After final mix, product is ready to add to vapor blast pot.

Pour Premera CW-VB into tank during filling process or mix thoroughly into previously filled tank. Each 1 gallon portion is designed for use in a clean or new 100-gallon tank (2 quarts per 50 gallons). Mix only as much Premera CW-VB as can be used within 2 to 5 days after mixing. A clean or new tank should always be used. Once Premera CW-VB has been mixed, it should remain covered until applied.

COMPATIBLE EQUIPMENT:

WAB: WET ABRASIVE BLAST

WAVB: WET ABRASIVE VAPOR BLAST POWER WASHING: AFTER DRY ABRASIVE BLASTING

UHP: ULTRA HIGH-PRESSURE WATER BLASTING

APPLICATION:

WAB (WET ABRASIVE BLAST) or WAVB (WET ABRASIVE BLAST) METHOD: After mixing according to the prescribed Mix Ratio apply Premera CW-VB per normal WAB (wet abrasive blasted) or WAVB (wet abrasive vapor blast) cleaned processes. When all areas have been thoroughly WAB (wet abrasive blast) or WAVB (wet abrasive vapor blast) cleaned, switch to Rinse Only phase on the blast equipment, or disconnect grit pod as needed to ensure Rinse Only phase. Final rinse with Premera CW-VB only (no grit) will ensure removal of any grit residue that may remain from blasting procedure. Dry time will depend on ambient conditions such as humidity, wind, etc. Surfaces are ready to coat when dry. In cool, humid conditions increasing airflow over the substrate may speed up drying time. Be careful not to contaminate the surface.

POWER WASHING (AFTER DRY ABRASIVE BLASTING METHOD): Premera CW-VB is added as the chemical additive in accordance to prescribed Mix Ratio to the water reservoir after the dry abrasive blasting process is achieved in any give area and prior to any rust back or flash rust or to prevent rust back or flash which may occur. Dry time will depend on ambient conditions such as humidity, wind, etc. Surfaces are ready to coat when dry. In cool, humid conditions increasing airflow over the substrate may speed up drying time. Be careful not to contaminate the surface.

UHP (ULTRA HIGH-PRESSURE WATER BLASTING METHOD): Premera CW-VB is added as the chemical additive in accordance to prescribed Mix Ratio to the water reservoir for the UHP (ultra-high pressure) blasting process. Dry time will depend on ambient conditions such as humidity, wind, etc. Surfaces are ready to coat when dry. In cool, humid conditions increasing airflow over the substrate may speed up drying time. Be careful not to contaminate the surface.

Premera CW-VB prepared surfaces will not "rust back" or "flash rust," if contaminants have been thoroughly removed, but atmospheric contaminants may settle on the Premera CW-VB prepared surface if left exposed and unpainted. Premera CW-VB treated areas, can be coated soon after the substrate is dry, preferably during the same shift or the same workday.

Effectiveness of the Premera CW-VB process may be confirmed by testing the surface for residual iron salts using Potassium Ferricyanide impregnated paper or commercially available contaminant testing kits.

EQUIPMENT CLEAN UP:

Clean hoses and equipment after each use. Do not allow Premera CW-VB to remain in equipment or hoses for extended periods of time. Flush all equipment with water. Collect and dispose of cleanup waste in accordance with all local, State, Federal, and other ordinances.



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NOTES:

- Additional washer pressure does not improve removal.
- Flush all equipment with potable water after use.
- > CW prepared surfaces will not "flash rust," but contaminants in air may settle on exposed surfaces.
- Coat treated areas when dry, preferably same workday.

Premera CW-VB meets or exceeds visual hygiene results. However, relying on visual verification is unreliable due to the inability to visually verify the absence or presence of invisible contaminants. When verifying Premera CW-VB performance, we recommend testing the surface for residual salts using a qualitative or quantitative iron chloride reactive testing or similar testing system to confirm hygiene results. Potassium ferricyanide or ferrous ion test kits may also be used.

Color of dry carbon steel surfaces prepared with Premera CW-VB depends on surface composition. Each individual surface will reflect uniformity. Acceptable uniform surface color ranges from a bright mirror-like finish to a dull gray. As noted above, final color depends on the age and composition of the steel, corrosion state, anchor profile (if any), weld pattern, anomalies in substrate metals, and other factors. Premera CW-VB process will not normally exhibit wide variations in hues, but may reveal stains and shadows existing in metals that are not visually detected after other cleaning methods. Visual stains and shadows may be touched up with detail work. Minimal visual variance due to metal anomalies may occur.

Premera CW-VB does not soften, degrade, remove or otherwise affect intact old coatings. When used within recommended dwell times, Premera CW-VB has no detrimental effect on galvanizing, inorganic zinc coating or thermal spray metal coatings.

Applicator training and on-site technical service may be offered on an as-needed basis. contact NCSI for information about customer initiated, paid technical service.

WARRANTIES AND DISCLAIMERS:

Nukote Coating Systems International, a Nevada, USA Corporation warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper mixture and application of the components by the applicator. Nukote Coating Systems has no role in the application of the finished polymer other than to manufacture and supply its two components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of plural component equipment and application of plural component materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Nukote Coating Systems International and executed under seal by a company officer.

