

# Convert<sup>™</sup> & Consolidate<sup>™</sup>

# IN-SITU, CHEMICAL REMEDIATION AND PROTECTION SYSTEM FOR ACID, CORROSIVE AND HEAVY INDUSTRIAL APPLICATIONS

## **PRODUCT DESCRIPTIONS:**

**Convert**<sup>™</sup> & **Consolidate**<sup>™</sup> – 2 chemical technologies for remediating and protecting in-situ concrete exposed various acids, corrosives and other damaging materials in new and in-service industrial applications.

Both can be used as standalone products, in combination with each other or with other chemical surface preparation products, patch materials or coating systems.

#### Convert<sup>™</sup>

A water-based, chemical surface preparation product for in-service concrete damaged by acids, corrosives and other damaging materials (such as sugars). It is also effective for use on new concrete and ASRimpacted concrete. (Contact the Company for additional information on remediation of ASR impacted concrete)

When applied, it infuses in and purges excessive insoluble salts to the surface and rebalances/buffers the pH of the concrete to make it acceptable for coating adhesion. When used on ASR-impacted concrete it disrupts the formation, expansion and propagation of further ASR formation. (It is used in conjunction with 2 other products, WashAway Xtreme and VersaGuard.)

## Consolidate<sup>™</sup>

A concrete reactive treatment, used after Convert<sup>™</sup>, that creates a film-free acid-resistant concrete. The chemically modified surface accepts coatings but in the case of future coating failure, keeps any future corrosive attack localized and prevented from spreading under the coating. It allows for patching of failed coating rather than complete removal and replacement.

# **Convert & Consolidate – Application Procedure**

# COVERAGE

**Convert<sup>™</sup>**: 80-150ft2 / 1US gallon (depending on porosity and severity of the concrete damage)

**Consolidate**<sup>™</sup>: 100-150ft2 / 1US gallon (depending on porosity and severity of the concrete damage)

Convert<sup>TM</sup> and Consolidate<sup>TM</sup> are both ready to use, DO NOT DILUTE. Do not allow product to freeze.

## Personal Protective Equipment (PPE) Requirements:

**Convert** is a caustic material, therefore proper protective equipment should be worn.

- Wear safety glasses with side shields.
- > Wear appropriate chemical resistant gloves. Neoprene gloves are recommended.
- > Wear appropriate chemical resistant clothing (coveralls).
- Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.
- Refer to SDS for additional instructions.

# Part 1 – Area Prep

- Pressure wash the entire surface area to remove all loose debris/ dirt leaving the cleanest substrate possible
- Remove all existing old coatings by blasting or scarifying. Ensure concrete is fully exposed prior to treatment with Convert.

# Part 2 – Convert

"**Convert**" provides the concrete surface with a complete removal of insoluble salts and provides essential chemical surface prep to ensure adhesion between in-service concrete & filling/ patching concrete compounds such as EMACO T-430 (BASF)

- Apply Convert liberally over the clean surface of the concrete. The concrete must be completely soaked with Convert. Best way of applying is by sprayer (DO NOT ATOMIZE), but it can also be applied by pouring the product onto the surface from the pail and spreading with a squeegee.
- Allow Convert to dwell for a minimum of 6 hours (the surface will turn white as the insoluble salts are being drawn out of the concrete)
- Thoroughly wash off the concrete surface with a pressure washer until all the product and whiteness has been removed and the foaming that will occur has stopped. Treated concrete will look noticeable greyer especially once it dries

# Part 3 – Concrete Repair

- Preferably use a rapid strength repair mortar with extended working time, such as EMACO T-430 (BASF)
- Fill potholes and skim coat over damaged areas
- Follow compound manufacturer's specs for proper skim coating over exposed damaged concrete and pothole fixing. A minimum of ½" thickness is required to achieve proper results when skim coating is required.

## Proceed to step 4

# Part 4 – Consolidate

"Consolidate" provides the concrete with a higher density, hardness and chemical resistance

- Re-clean surface with water after the patching has been completed and blow out/ remove any standing puddles of water as best as possible
- Apply Consolidate with a sprayer liberally over the entire surface. It should be applied enough that it is diffused into the concrete but not leave a film on the surface. (DO NOT ATOMIZE)
- > Allow **Consolidate** to dwell on substrate for approx. 18-24 hours
- A final pressure wash of the entire surface is required to clean away any residual product and any dirt that may have accumulated.
- > Once dry, surface is ready to receive the top coat.

### Notes:

- Apply in temperatures above 5 C
- > Avoid applying any product in the rain as it will dilute and wash off
- If applying in high sun and heat, keep substrate wet with product to allow reaction to occur. If it dries too quickly, the product will evaporate off and the reaction will not occur
- Excessive effluent resulting from washing the concrete surface after treating with Convert can be directed into the sump. The pH of the water will be mildly alkaline and the sump will contain residual alkalinity and insoluble salts extracted in the process

# **Testing:**

- Test the concrete's pH before and after the Convert process. Soak with distilled or de-ionized water and use litmus paper (pH strips). Once the Convert process is completed, this will provide the concrete substrate with a pH reading above 7.
- To test the substrate to see if it is dry enough for the coating to be applied, use the "Plastic Sheet Method" (ASTM D4263-83) Tape a small square of polyethylene (eg. 12" x 12") to the concrete substrate and watch for moisture buildup on the plastic. This can occur over the period of about 16 hours.

#### Refer to SDS for additional information.