

Zerust® Zerion™ C-711

CORROSION MANAGEMENT FOR ABOVEGROUND STORAGE TANKS

PRODUCT INFORMATION

KEY OIL & GAS CLIENTS USING ZERUST® PRODUCTS

- Conoco Philips
- Shell
- Petrobras
- EPPCO
- PEMEX
- Baker Hughes
- Schlumberger
- Halliburton

Zerust® Zerion™ C-711 is a versatile new corrosion inhibitor specifically designed to protect soil side bottoms of Aboveground Storage Tanks (ASTs). The product can protect single bottom tanks with soil side liners or double bottom tanks. Its 3-way action provides a new dimension of effectiveness that is best in class in the market today.

Three forms of protection:

1. Fast acting Vapor Corrosion Inhibitors (VCI) to protect weld joints, etc.
2. Phased release VCIs provide many years of protection
3. Soluble Corrosion Inhibitors (SCI) mitigate corrosion from moisture accumulation

The combination penetrates gaps and interstices under the tank bottom plates to provide comprehensive coverage.

New Tanks/Bottoms: Use as a dry powder mixed with tank foundation sand/soil for new tank construction or when tank bottoms are being replaced.

Existing Tanks: Deploy as a liquid under tank bottom, between the tank bottom plates and the containment layer.



USER BENEFITS

- Easy-to-use system that can be replenished while the tank is in operation.
- Can be combined with simple monitoring procedures to ensure effectiveness of the solution and peace-of-mind.
- Corrosion protection for voids and interstices that are impossible to protect with other methods.
- Protection for tank bottom plates and welds with little to no surface preparation.
- May be used in conjunction with cathodic protection or independently.
- VCIs offer non-permanent corrosion protection at the molecular level that is safe and eco-friendly.
- Vapor action ensures uniform distribution within the tank bottom.
- Service life of tank bottom can be increased significantly at minimal cost.

CREDENTIALS

- 30+ years of experience in corrosion prevention
- Client support in 50+ countries
- Member of API
- Chair key task group at NACE International



MONITORING OF EFFECTIVENESS

The solution effectiveness can be easily monitored using electrical resistance (ER) probes and/or metal coupons. Soil sampling can be done to monitor concentration of inhibitors if necessary.



PRODUCT APPLICATION

New Tanks and Bottom Plate Replacements:

After construction of the tank pad, Zerion™ C-711 is evenly applied at a rate of 3 kg per 10 m² to the tank bottom sand/soil base and mixed with a hand rake. For concrete pads, Zerion™ C-711 can be applied directly on top of the concrete. The construction of the steel bottom then proceeds as normal. Caulking is recommended between the tank edges and the concrete base to minimize water penetration.

Existing Tanks:

The Zerion™ C-711 is dissolved in potable water (10% solution by weight) and the solution is pumped between the tank bottom plates and the containment liner/double bottom. Typical application is 35 liters of solution per 10 m² of surface area of tank bottom.

Leak detection/telltale pipes, or bore holes drilled horizontally into the tank pad, can be used to inject the solution.

DURATION OF PROTECTION

For a new tank, or bottom replacement, typical duration of protection is 5 - 10 years before inhibitor replenishment is required through injection of the liquid solution. For existing tanks with liquid Zerion™ C-711 injections, replenishment is recommended every 3 - 5 years. The replenishment can be tied into periodic monitoring and maintenance of the effectiveness of the solution.

PEACE OF MIND

In addition to Zerust® Zerion™ C-711, the product can also be combined with a service option to apply the solution and provide ongoing annual maintenance for storage tanks. The full service, including monitoring of the solution and annual reporting, has been designed to offer clients peace of mind with minimal operations impact.

QUESTIONS?

Please contact a Customer Service Representative at +1 (763) 225-6600 or email sales@zerust.com.

PRODUCT PROPERTIES

- Appearance: White crystalline powder
- pH: 8-10 for 1% solution
- Odor: Slightly acidic
- Flash Point: Not applicable
- Flammability: Not applicable
- Sold in 50lb (25kg) bags

SAFETY & HANDLING

- Avoid contact with eyes and skin through use of safety glasses and gloves.
- Use a dust mask to prevent inhalation.
- See MSDS for more information

STORAGE

- Shelf life is 36 months
- Store in a sealed container in a dry, ventilated warehouse without exposure to direct sunlight and temperature below 70°C (170°F)

A product of:
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