

CERAMIC PARTICLE LOADING

The CeRam-Kote AF Marine is a corrosion resistant, impact resistant, abrasion resistant, flexible coating technology that utilizes our **ceramic particle loading and zinc oxide**. Ceramic particle loading is the addition of a complex series of ceramic particles into a polymer which causes the polymer to out-perform its basic chemistry.

In addition to improving the chemical performance of polymers, ceramic particle loading significantly enhances the dynamic mechanical performance of the polymer.

CeRam-Kote AF Marine protects by binding ceramic particles to a unique polymer, thus creating an **encapsulating ceramic shell**. Each ceramic particle is resin coated and becomes tightly packed in the cured film.

The **compact density** of the cured film of CeRam-Kote AF Marine yields dynamic intangible benefits such as:

- **Excellent corrosion resistance.**
- **Excellent immersion resistance.**
- **Excellent cathodic disbondment resistance.**
- **Excellent abrasion resistance.**
- **Excellent impact resistance.**
- **New Ion-field generating foulant barrier technology.**

TOUGH BARRIER COATING

CeRam-Kote AF Marine is formulated for severe corrosion and salt water immersion service.

CeRam-Kote AF Marine currently protects expensive and critical equipment in industries serving Oil and Gas, Offshore, Marine, Petrochemical and Industrial Markets with proven documented results. Applications have expanded into the Food and Beverage, Paper and Pulp, Wastewater Treatment, Electrical Power, Transportation and Mining Industries.

Extremely high adhesion to virtually any substrate (including marginally prepared substrates making this product an excellent surface tolerant coating) combined with extraordinary mechanical properties, make CeRam-Kote AF Marine a superior protective coating where high abrasion and severe corrosion problems exist.

Note: More detailed information is available in the Summary Test Data or is available upon request.

PHYSICAL PROPERTIES – TEST DATA

Adhesion (ASTM D4541, elcometer pull-off)	>3,000 psi (20.68 MPa)*
Abrasion Resistance (ASTM D 4060, Tabor Test 1,000 cycles, CS 17 wheel, 1kg)	20 milligrams loss**
Flexibility (ASTM D 522)	15% elongation
Impact Resistance - Direct (ASTM D 2794)	140 inch-pounds
Salt Spray (ISO 7253)	4,800 hours
Cathodic Disbondment (CAN/CSAZ245.20-10, 23°C, 28 days (Pass = 20 mm)	3.25 mm Disbondment
Seawater Immersion, 6 Months ISO 12944 (ISO 20340) - Im2 and NORSOK M-501 systems 3B and 7	PASS
Cathodic Disbondment, 6 Months ISO 12944 (ISO 20340) - Im2 and NORSOK M-501 systems 3B and 7	PASS, 12 mm

*Adhesion test values for normal production can vary up to 35%.

**Abrasion test values for normal production has a max acceptable value of 75 mg loss.



ABS Certified to ISO 12944 Im2

ENCAPSULATING CERAMIC SHELL