CERAMIC PARTICLE LOADING

The CeRam-Kote 54® SF is a 100% solids, corrosion resistant, impact resistant, abrasion resistant, flexible coating technology that utilizes our **ceramic particle loading**. 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.

Total performance characteristics of CeRam-Kote 54® SF are significantly better than liquid epoxy, fusion-bond epoxy and other high performance coating systems.

ENCAPSULATING CERAMIC SHELL

CeRam-Kote 54® SF 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 54® SF yields dynamic intangible benefits such as:

- **Excellent corrosion resistance**.
- **Excellent immersion resistance**.
- **Excellent cathodic disbondment resistance**.
- **Excellent abrasion resistance**.
- **Excellent impact resistance**.

TOUGH BARRIER COATING

CeRam-Kote 54® SF's **direct-to-substrate** one-coat system translates to increased production efficiency and significantly reduced down-time, essential in industry today.

CeRam-Kote 54® SF is formulated for severe corrosion and salt water immersion service.

CeRam-Kote 54® SF 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 54® SF 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.*

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