



## **PRODUCT DATA SHEET: CERAM-KOTE 54® TZS PIPE COATING FORMULA**

**Description:** CeRam-Kote 54® TZS is a thin-film, spray applied ceramic epoxy coating engineered to provide excellent abrasion and corrosion protection. CeRam-Kote 54®'s TZS is a highly modified epoxy resin system that has been heavily loaded with ceramic particles enhancing its ability to perform well in a variety of abrasive environments.

**Suggested Uses:** Blast Joints, Rod pumping wells, Drill pipe, Drilling risers, Sucker rods, External coating of oilfield tubing and casing. Anywhere high abrasion resistance is needed.

### **PHYSICAL DATA (as packaged)**

**Volume Solids:** 70% +/- 2%

**Weight Solids:** 86% +/- 1%

**VOC:** 2.2 lb/gal (244 g/l) less water

**Weight:** 1.80 kg/l

**Mixing Ratios**

**by Weight:** Twenty and one-half (20.5) parts of Part A to one (1) part of Part B by weight

**by Volume:** Twelve (12) parts of Part A to one (1) part of Part B by volume

**Number of Coats/**

**Dry Film Thickness:** CeRam-Kote 54® TZS is applied in two coats to achieve a final DFT of 6-10 mils (150 - 250 microns).

**Surface Preparation/Mixing/  
Thinning/Application:**

Application of CeRam-Kote 54® TZS on I.D. of Oil Country Tubular Goods is a licensed application process. More information can be obtained by contacting Freecom, Inc.

**Pot Life:**

Pot life for CeRam-Kote 54® TZS at 72°F (22.2°C) is approximately one (1) hour. Colder temperatures will increase the pot life and warmer temperatures will decrease the pot life. Keep cans out of direct sunlight to prevent heat buildup.

**Shelf Life:**

If stored in a dry enclosed area under 95°F (35°C), CeRam-Kote 54® TZS has an indefinite shelf life. However, it is recommended that CeRam-Kote 54® TZS be used within two (2) years of delivery.

**Storage Conditions:**

As long as the material is stored under its flashpoint (65°F, 18°C), there should be no detrimental effects. If the coating is stored at temperatures higher than 65°F or 18°C, it is important to ensure the containers for Part A are sealed to limit the amount of vapor pressure build-up and limit the amount of solvent release. If the coating is stored at below freezing temperatures (32°F or 0°C) some resin crystallization may occur. Once the coating temperature is brought back to above freezing, the resin will return to normal. Freecom recommends the coating to be warmed to 40 - 50°C to revert any crystallization that may have occurred. This will have no detrimental effects to the properties of CeRam-Kote TZS.

**Safety:**

See individual product label for safety and health data. A Material Safety Data Sheet is available upon request.