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Coatings
Cements
Release Compounds
Dry Film Lubricants
Metallizing Compounds

SURFACE ENGINEERING BULLETIN

SermaBond 487

SUBJECT

The use of SermaBond 487 – Silicon Carbide Coating or Cement

DESCRIPTION

SermaBond 487 is a compound containing silicon carbide powder dispersed in an inorganic binder. This product offers oxidation protection at elevated temperatures as well as high absorptivity. The material can be used on refractory metals, graphite or carbon cloth to provide an adherent matrix for models or structures subject to high temperatures.

PRODUCT SPECIFICATION

SermaBond 487 is supplied as a two-part mix:

Part 1 – Vehicle	
PH	11 – 11.7
Weight per gallon	10.16 – 10.66 lbs
Specific gravity	1.22 – 1.28
Viscosity @ 77°F #2 Zahn Cup	15 – 17 seconds
% Non-Volatile, by weight (650°F, 30 minute exposure)	26 – 29%
Shelf life	6 months
Part 2 – Pigment	
Silicon Carbide Weight per gallon	7.7 lbs

Mixed Part 1 and Part 2	
Weight per gallon	15.0 – 16.2 lbs
Specific Gravity	1.80 – 1.95
Pot Life	6 hours

APPLICATION INSTRUCTIONS

- A. Surface Preparation
1. Degrease the substrate (remove any organic contamination)
 2. Roughen surface, wet or dry grit blast with clean Al₂O₃ media
 3. Remove roughening residue
- B. Application of Coating
1. Thoroughly mix the coating by adding Part 2 powder to the Part 1 while stirring. If less than the gallon kit is being mixed, use a ratio of 1.6 grams of Part 2 per milliliter of Part 1. No thinning is required.
 2. Apply the coating to clean, roughened surface. Spraying is preferred.
 3. Dry parts at 175± 25°F for fifteen minutes minimum.
 4. Cure parts at 650± 50°F for fifteen minutes minimum. (Alternate cure times/temps are possible)
 5. Cool parts to room temperature
 6. One coat is generally sufficient for complete coverage. However, if additional coats are needed, repeat steps B2 through B5.

TOXICITY

Consult the MSDS for this product for complete safety and handling information.

The information above is provided in good faith and is believed to be correct at the time of printing. Since the conditions of end use are beyond the control of Sermatech International Inc, characteristics, performance, and suitability of the product cannot be guaranteed.