

DEOXALUMINITE MATERIAL SPECIFICATIONS

1. SCOPE: The material desired under this specification is an aluminum based paint primer suitable for use in priming metal prior to welding. Applied on or between bare metal surfaces, the material will protect the metal of the weld area from corrosion before and after welding without affecting the welding procedure.
2. REQUIREMENTS: Material must be thoroughly mixed prior to testing.
 - 2.1 Non Volatile: 22% minimum which will consist of at least:
 - A. 8% aluminum as metal
 - B. 13% noncarbonizing binder
 - C. .75% by weight deoxidizers

Method of Test: Dry 2 grams (approx.) of material for 4 hours at 212°F - 214°F. Cool, then weigh and calculate.

- 2.2 Viscosity: 10 - 15 seconds. Viscosity will be measured in a Ford #4 cup at 80°F.
- 2.3 The material must be supplied in a satisfactory spraying consistency.
- 2.4 Weight: 7.6 - 8.1 lbs/gal.
- 2.5 Rust Proofing: The material must provide corrosion protection for both the welding area and weld metal before and after welding and must pass the following test:
 - 2.51 Method of Test: Coat 3 assemblies of 2 pieces of 1" x 5" x 20 ga. CR LCOR steel with DEOXALUMINITE. Spot weld, then bake at 350°F for 30 minutes. After baking, subject the assemblies to salt spray. Where paint has not been burned away, it shall stand 48 hours of salt spray.
- 2.6 Drying: The material will dry thoroughly tack free in 15 minutes
 - 2.6.1 Method of Test: Air dry material 15 - 30 minutes. Then bake according to one of the following schedules:
 - 30 minutes at 350°F
 - 25 minutes at 375°F
 - 15 minutes at 400°F

Coating will not blister or flake in bending around 1/4" radius. Coating will not flake upon shearing. (Note: For general operating purposes, material need not be baked, but only air dried.)

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- 2.7 Welding Characteristics: The characteristics of welding will not be appreciably altered by the presence of DEOXALUMINITE in the before or after baking period. With proper technique and materials, a Section IX of the ASME code and Mil standard 248 (see 4.4.4.2) can be obtained.
- 2.8 Stability: The material must not jell or liver upon standing.
- 2.81 Method of Test: Place a 3/4 full, sealed paint can in an oven for 16 hours at 140°F. There will be no jelling or livering of the material in the container.
- 2.82 Storage Stability: The material will show no curdling, livering or caking after six months at 70°F - 90°F. It will be smooth, free of lumps and skins and will mix readily to a smooth, homogenous state.
- 2.9 Water Impermeability: The material when applied in a .001" film thickness will not blister, peel or roughen according to the following test:
 - 2.91 Method of Test: Prepare panels so that each panel will have a film thickness of .001". Age the panels for 16 hours at 110°F. Immerse the aged panels in distilled water (65°F - 75°F) for a soaking period of 250 hours. After the 250 hour period, remove the test panels from the water and examine immediately for blistering, peeling or roughness.
- 2.10 Hazardous ID Codes: Health - 2, Flammability - 3, Reactivity - 1