

**CORROSION PROTECTIVE SECONDARY COATING,
ALUMINUM FILLED, ORGANIC RESIN BONDED****WSA-M21P26-A****CORROSION PROTECTIVE SECONDARY COATING,
ALUMINUM FILLED, ORGANIC RESIN BONDED,
1000 h SALT SPRAY****WSA-M21P26-A2****1. SCOPE**

The materials defined by these specifications are metallic coatings which consist primarily of metallic aluminum dust, a modified epoxy resin vehicle and additives to prevent settling and chemical reaction during storage.

2. APPLICATION

WSA-M21P26-A: This specification was released originally as an aluminum rich secondary coating over ESA-M1A270-A (zinc/aluminum coated steel) to provide additional protection for fuel lines, brake lines, power steering lines and transmission oil cooling lines.

WSA-M21P26-A2: This specification was released originally as an aluminum rich secondary coating over zinc to provide additional corrosion protection for clips and tube nuts used to secure fuel, brake, power steering and transmission oil cooler lines.

3. REQUIREMENTS**3.0 STANDARD REQUIREMENTS FOR PRODUCTION MATERIALS**

Material suppliers and part producers must conform to the Company's Standard Requirements For Production Materials (WSS-M99P1111-A).

3.4 PHYSICAL PROPERTIES

3.4.1	Non-Volatile Content, by weight, min (FLTM BI 102-01)	45.0%
3.4.2	Total Metals (Aluminum plus Additives) Contents, by weight, min (ASTM D 2371)	19.0%
3.4.3	Weight per Volume, min at 23 +/- 2 °C (FLTM BI 102-02)	1.12 kg/L
3.4.4	Volume Solids Content (Analytical), min (FLTM BI 102-05)	32.0%

Date	Action	Revisions
2004 03 17	Revised	Returned to active status, rev para 2, 3.5.1, 3.5.2 B. Curtiss
2004 01 28	N-STATUS	See Material Engineer for replacement; para 3.0 inserted; para 3.1, 3.2, 3.3, 3.8 and 4 deleted B. Bumsida
1991 08 02	NC00E10138962001	Released J. Spencer, K. Gribble



3.4.5 Flash Point, min (ASTM D 56) 32 °C

3.4.6 Stability

3.4.6.1 Gassing, min (FLT M BI 102-03) 16 h no change

3.4.6.2 Storage Stability

The material shall not gel, settle hard or have a viscosity change from the original in excess of 5 s when left undisturbed for 60 d at 23 +/- 2 °C.

Conformance to this requirement is mandatory for all new materials submitted for engineering approval and for all production material supplied to the Company and subsequently stored under the above conditions. This is not required as a routine control test.

3.5 SUBSTRATE

3.5.1 WSA-M21P26-A

The substrate shall be low carbon steel butt welded or double wall brazed construction which conforms to one of the following specifications:

SAE J526
SAE J527

Welded Low Carbon Steel Tubing
Brazed Double Wall LC Steel
Tubing
Tubing

WSA-M1A308-A1/A2

The above tubing shall be coated with zinc/aluminum alloy per ESA-M1A270-A. If necessary, a hexavalent chromium free conversion coating may be used over the zinc/aluminum alloy to enhance the adhesion and corrosion resistance properties of the tube. The substrate and all coatings must be called out on the Engineering Drawing.

3.5.2 WSA-M21P26-A2

The substrate shall be low carbon steel, zinc plated per WSD-M1P85-A2 and coated with a hexavalent chromium free coating (example: trivalent chromium conversion coating). Other substrates may be used, but performance may vary and must be determined on a case by case basis. The substrate and all coatings must be called out on the Engineering Drawing.

3.6 FILM PROPERTIES

3.6.1 Film Type

The film shall consist of single aluminum rich epoxy.

3.6.2 Film Cure

Must be sufficiently cured at the time of packing to withstand normal handling and shipping without marring.