



PHOSPHATE BASE, BONDED PTFE RESIN, MOLYBDENUM DISULFIDE COATING

WSS-M3P30-A2

1. SCOPE

This specification defines the performance levels for a proprietary torque tension repeatability coating with moderate corrosion resistance. Coating consists of a zinc phosphate base with a resin-bonded, heat-cured, molybdenum disulfide and fluoropolymer lubricant package.

2. APPLICATION

Initial application is two-piece wheel nuts for hub-piloted wheels, where torque-tension repeatability over many uses is primary desired characteristic.

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).

3.3 PHOSPHATE SUBSTRATE

The zinc phosphate shall have a smooth compact macrocrystalline structure which forms a dense, uniform coating.

3.4 COATING THICKNESS

A specific top coat thickness is not specified. The minimum thickness shall be sufficient to meet the required torque-tension and corrosion resistance requirements.

3.5 OIL SEALER

A water base corrosion inhibitor shall be applied as a sealer as the final processing step. Parts need not be completely dry to the touch, however, parts shall not be excessively oily.

3.6 APPEARANCE

The coating shall be a uniform semi-gloss black, free of blister.

3.7 CORROSION RESISTANCE (SAE/USCAR-1)

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3.8 GASOLINE IMMERSION (ASTM D 471)

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Finished metal parts shall show no evidence of coating failure or loss of adhesion after immersion in reference fuel "B" at room temperature.

Date	Action	Revisions
2003 08 28	Revised	Para 3.0 inserted; Para 3.1, 3.2, 3.10, 3.12
1996 11 15	Activated	D. Frederick



3.9 OIL IMMERSION (ASTM D 471)

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Finished parts shall show no evidence of coating failure or loss of adhesion after immersion in IRM 903* at room temperature.

* Replacement oil for ASTM D 471, Oil #3.

3.11 TORQUE TENSION REPEATABILITY (SAE J1965)

Must meet requirements