



Phosphate Coating; Light

[TT-C-490D]

Specification covers cleaning methods and pre-treatment processes.

Type I: Intended as a general all-purpose pretreatment prior to painting.

Type II and IV: Intended primarily for use where metal parts are to be formed after painting.

Type III: Intended for use where size and shape preclude using type I, II or IV and where items containing mixed metal components are assembled prior to treatment.

Note: Cleaning material shall not contain any chemical which is classified in the Clean Air Act Amendments of 1990 as a Class I or Class II ozone depleting substance.

Light coating for use as a paint base.

Cleaning methods:

Method I: Mechanical or abrasive cleaning (for ferrous surfaces only).

Method II: Solvent cleaning.

Method III: Hot Alkaline (for ferrous surfaces only).

Method IV: Emulsion.

Method V: Alkaline derusting (for ferrous surfaces only).

Method VI: Phosphoric acid.

Type I: Zinc phosphate. Class 1 - spray application (150mg/sq. ft. min. - 500mg/sq. ft. max). Class 2A - Immersion or Dip application (300mg/sq. ft. min/500mg/sq. ft. max). Class 2B - Immersion or Dip application (600mg/sq. ft. min to 1000mg/sq. ft. max.).

Type II: Aqueous Iron Phosphate (35mg/sq. ft. min.)

Type III: (.0003-.0005") Organic pretreatment coating (unless otherwise specified, MIL-C-8514 of DOD-P-15328).

Type IV: Non-aqueous iron phosphate. (35mg/sq. ft. min.)

Type V: Zinc phosphate (500mg/sq. ft. min. - 1100mg/sq. ft. max.).