



LUNA XP-CD-E Technical Datasheet

Luna Innovations Incorporated

Description

Luna XP-CD-E is a charge dissipative conformal coating intended for use with printed circuit boards and electronic components. It is a one component system designed to be brush- or spray-applied using conventional coating equipment. It has an acceptable use temperature range of approximately - 50°C to 70°C.

Packaging & Storage

Luna XP-CD-E is a flammable liquid. It should be stored in a dry place and in tightly closed original containers around 25°C. Shelf life is intended to be at least two months from shipping. Opened containers should be resealed under dry inert gas to extend shelf-life.

System Preparation

Substrates to be coated should be clean of contamination. Use common surface cleaning methods as for standard conformal coating application. Luna XP-CD-E may be sprayed, brushed, or dipped (although specific dip application has not been tested).

Material in solution may settle over time. If that happens, hand mixing should be sufficient to redisperse the material. Ensure good mixing prior to use.

Application

Luna XP-CD-E should be mixed prior to use to ensure homogeneity. Common paint mixing methods are acceptable, although open container time should be minimized to prevent coating volatilization. Closed container agitation methods are preferred. Luna XP-CD-E may be sprayed using a HVLP paint gun with a 40 psi gun pressure. As each spray gun may be different, the end user should experiment with material flow rate into the gun spray path to obtain best results. Luna has found that a low material flow rate results in the best film quality. Luna XP-CD-E should be applied at approximately 15-20 mils thick wet-film thickness for approximately 1-2 mil dry-film thickness for best results. Thinner film thicknesses are possible by limiting the dwell time over the target substrate. Rapid passes may be used to achieve a thinner film build.

Cure Schedule

Luna XP-CD-E dries to the touch within ~ 1 hour under ambient conditions, but the time required to reach optimum properties under ambient conditions is 7 days. Accelerated cures are possible and Luna recommends an initial ~12 hour cure under ambient conditions followed by forced cure in a vacuum oven at ~ 75°C for 12 hours under moderate vacuum. Time and vacuum level is not critical.

Physical Properties:

Color: Milky white liquid, transparent after drying

Safety considerations: Please review the Safety Data Sheet prior to use. After curing, there are no skin or inhalation hazards.

Shelf Life: Shelf life is anticipated to be approximately two months if materials are stored in the original container.

Disclaimer: *Data presented in this TDS have not yet been independently verified. Luna Innovations makes no representation or warranty as to the comprehensiveness or accuracy of any information or of the suitability for any purpose of this material. This document serves as a guide for coating handibility and evaluation. Luna Innovations will not be responsible for damages arising from the use of or reliance upon the information or materials provided and recipient hereby agrees to indemnify Luna Innovations for any such damages, including without limitation legal fees and expenses. For more information, please contact Adam Goff, goffa@lunainc.com, 434-220-2513.*