TECHNOLOGY TRANSFER

Interest Exploratory Note

Coating Compound EPY 1061

Vikram Sarabhai Space Centre has developed different types of adhesive compounds catering to specific applications in Launch Vehicles and Satellites. These materials may also find various industrial applications such as bonding, sealing, coating, potting, laminating, molding etc. The following are some of the new formulations tailored to meet specific requirements as adhesive, sealant, coating and potting compounds. These are derived from resins and different curing agent combinations, modified with various classes of materials such as flexibilizer, toughening agent, fillers, pigments, cure accelerators etc.

EPY1061 is an amidoamine modified epoxy based system specially developed to protect the metal surfaces from corrosion in aqueous strontium perchlorate medium. This coating and sealing system consists of two main components Part A (resin) and Part B (hardener) and a third component Part C which is a solvent. Parts A, B and C are mixed in a specified ratio and sprayed into the metal surface using spray gun to get corrosion resistant coating. The coating adheres well to the metal substrate and reaches fully cured condition at room temperature in 72 hours

Typical Properties / characteristics:

PROPERTY	
Colour and consistency	Red coloured viscous liquid
Viscosity at 25 °C (cps)	20000-40000
Pot life/ Gel time	> 25 minutes.
Flow Time, Part A, B & C mixed	35 – 50 seconds.
Cure	Ambient
Lap shear strength on Al-Al at RT	> 90 ksc.

Department of Space has authorised NSIL for Technology Transfer of Coating Compound EPY 1061 to suitable entrepreneurs/ Industry in India. Interested Parties may please fill the enclosed form and send by email to contact-nsil@isro.gov.in