

HumiSeal® 1B59 LTX Pre-blends Synthetic Rubber Conformal Coating Technical Data Sheet

HumiSeal® 1B59 LTX Pre-blends are air drying, single component, synthetic rubber conformal coatings. HumiSeal® 1B59 LTX Pre-blends are formulated for effective application using film coater application methods, although other methods can also be used.

HumiSeal® 1B59 LTX Pre-blends demonstrate the following advantages:

- Extremely low moisture vapor permeability.
- Protection against moisture, salt / corrosive environments, and dirt
- Improved thermal stability compared with other conformal coatings.
- Excellent flexibility putting low stress on components
- Fluoresces under UV for ease of inspection and is easily repaired.
- Compliant to China Standard GB30981-2020*

*Standard GB30981-2020 defines limits on VOCs and solvent usage for Conformal Coatings in China.

Properties of HumiSeal® 1B59 LTX Pre-blend Liquid Coatings

Product	Viscosity / cPs	Solids Content / %	Density / g/cm ³	VOC / g/L
1B59 LTX PB65	60-70	12-14	0.80-0.82	700
1B59 LTX PB85	80-90	13-15	0.80-0.82	692

Drying Time to Handle, per Fed-Std-141, Meth. 4061
Shelf Life at Room Temperature, from DOM

30 minutes
12 months

Properties of HumiSeal® 1B59 LTX Pre-blend Cured Coatings

Recommended Coating Thickness
Recommended Curing Conditions
Recommended Stripper
Minimum Operating Temperature
Maximum Operating Temperature
Glass Transition Temperature - DSC
Modulus - DMA

25 - 75 microns
24 hrs @ RT or 30 min @ 76°C
HumiSeal® Stripper 1080

Elongation at -40C
Elongation at 23C
Dielectric Withstand Voltage, per MIL-I-46058C
Dielectric Breakdown Voltage, per ASTM D149
Surface Insulation Resistance 85C/85% RH IPC CC 830

-65°C
150°C
-49.6°C
75 MPa @ -40°C
20 MPa @ 20°C
238%
491%
>1500 volts
7500 volts
9.5 Log₁₀ Ohms

Application of HumiSeal[®] 1B59 LTX Pre-blends

Conformal coatings can be successfully applied to boards that have been cleaned prior to coating and also to boards assembled using low residue “no clean” assembly materials. Users should perform adequate testing to confirm compatibility between the conformal coating and their particular assembly materials, process conditions and cleanliness level. Please contact HumiSeal for additional information.

HumiSeal[®] 1B59LTX Pre-blends are specifically diluted to a viscosity for film-coater application. No additional dilution is required. HumiSeal[®] Technical Support should be contacted if any further advice on application methods is required.

Storage

HumiSeal[®] 1B59 LTX Pre-Blends should be stored away from excessive heat or cold, in tightly closed containers. HumiSeal[®] products may be stored at temperatures of 0 to 35°C. Prior to use, allow the product to equilibrate for 24 hours at a ambient temperature.

Caution

Application of HumiSeal[®] Conformal Coatings should be carried out in accordance with local and National Health and Safety regulations.

The solvents in HumiSeal[®] Conformal Coatings are flammable. Material should not be used in presence of open flame or sparks. Use only in well-ventilated areas to avoid inhalation of vapours or spray. Avoid contact with skin and eyes.

Consult MSDS/SDS prior to use.

Contact HumiSeal[®]

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