

HumiSeal

HumiSeal® 1B51LU/521 2:1 Synthetic Rubber Conformal Coating Technical Data Sheet

HumiSeal[®] 1B51LU/521 2:1 is a fast drying, single component, synthetic rubber conformal coating that has been formulated for use in automated spray equipment without requiring additional thinning. The coating demonstrates excellent flexibility, low stress on components, fluoresces under UV light for ease of inspection and is easily repaired.

Properties of HumiSeal® 1B51LU/521 2:1

Density, g/cm³ per ASTM, Meth. D1475	0.88 ± .02
Solids Content, % by weight per Fed-Std-141, Meth. 4044	13.84 ± 2
Viscosity, centipoise per Fed-Std-141, Meth. 4287	40 ± 15
VOC, grams/litre	756
Drying Time to Handle per Fed-Std-141, Meth. 4061	10 minutes
Recommended Coating Thickness, microns	25 - 75
Recommended Curing Conditions	24 hrs @ RT or 30 min @ 76°C
Time Required to Reach Optimum Properties	7 days
Recommended Stripper	HumiSeal Stripper 1081
Shelf Life at Room Temperature, DOM	18 months
Thermal Shock, 50 cycles per MIL-I-46058C	-65°C to 125°C
Coefficient of Thermal Expansion - TMA	55 ppm/°C
Glass Transition Temperature - DSC	14°C
Modulus - DMA	93.1 MPa @ -20°C
	73.5 MPa @ 0°C
	35.3 MPa @ 20°C
Dielectric Withstand Voltage, volts per MIL-I-46058C	>1,500
Dielectric Breakdown Voltage, volts per ASTM, Meth. D149	4900
Dielectric Constant, at 1MHz and 25°C per ASTM-D150-65T	2.5
Dissipation Factor, at 1MHz and 25°C per ASTM-D150-65T	0.07
Insulation Resistance, ohms per MIL-I-46058C	200 x 10 ¹² (200T)
Moisture Insulation Resistance, ohms per MIL-I-46058C	10 x 10 ⁹ (10G)
Fungus Resistance, per ASTM-G21	Passes

Application of HumiSeal® 1B51LU/521 2:1

Conformal coatings can be successfully applied to substrates that have been cleaned prior to coating and to substrates assembled with 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 levels. Please contact HumiSeal[®] for additional information.

HumiSeal[®] 1B51LU/521 2:1 diluted to a specific viscosity for immediate use. No additional dilution is required. Customers should establish if this preblend product is suitable for their equipment and application method before commercial use. HumiSeal[®] Technical Support should be contacted if any further advice on Pre-Blends and equipment is required.



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Spraying

HumiSeal[®] 1B51LU/521 2:1 can be sprayed using automated spraying equipment. Spraying should be done in an environment with adequate ventilation so that the vapor and mist are carried away from the operator.

Storage

HumiSeal[®] 1B51LU/521 2:1 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 room temperature of 18 to 32°C.

Caution

Application of HumiSeal[®] Conformal Coatings should be carried out in accordance with Local and National Health and Safety regulations. The solvents in HumiSeal[®] 1B51LU/521 2:1 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 SDS prior to use.

Contact HumiSeal®

HumiSeal North America

201 Zeta Drive Pittsburgh, PA 15238 USA Tel: +1 412-828-1500 Toll Free (US only): 866-828-5470 sales@humiseal.com

HumiSeal Technical Center

295 University Avenue Westwood, MA 02090 USA Tel: +1 781-332-0734 Fax: +1 781-332-0703 techsupport@humiseal.com

HumiSeal Europe

505 Eskdale Road, IQ Winnersh Berkshire RG41 5TU UK Tel: +44 (0)1189 442 333 Fax: +44 (0)1189 335 799 europeansales@chasecorp.com

HumiSeal India

J-154, M.I.D.C Bhosari Pune 411 026 Maharashtra India Tel: +91 20 66308098 indiatechsupport@chasecorp.com

HumiSeal S.A.R.L

4/6 Avenue Eiffel 78420 Carrieres-Sur-Seine France Tel: +33 (0) 1 30 09 86 86 Fax: +33 (0) 1 30 09 86 87 humiseal.sarl@chasecorp.com

HumiSeal Asian Support

Tel: 852-9451-6434 Fax: 852-2413-6289 asiatechsupport@humiseal.com

HumiSeal Europe Support Tel: +44 (0)1189 442 333

Fax: +44 (0)1189 335 799 europetechsupport@chasecorp.com

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