

HEAT	Chemical Resistance	Flame&Smoke	Agency Listings
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The unique performance advantages of Chlorinated Poly-Vinyl Chloride (CPVC) are available for processing on conventional vinyl extrusion equipment with TempRite EE compounds exclusively from Lubrizol, the world leader in CPVC markets and technology.

Advances in CPVC extrusion material technology now allow cost effective replacement of expensive engineering resins, and value added substitution where commodity thermoplastics do not perform. End-use and processing advantages make TempRite® EE105 ideally suited for many applications. Excellent electrical properties, inherent UL 94 5Va flame performance, mechanical property retention at elevated temperatures and broad chemical resistance make CPVC a uniquely performing engineering thermoplastics.

Lubrizol's technical center offers a full range of design, engineering, technical support services, and on-site processing assistance to shorten the application development cycle and accelerate commercialization. Sales offices in 11 worldwide locations offer unequaled service and support.

TempRite® EE105 is available in made to stock colors directly from Lubrizol's global distribution network. Custom colors are also available. Packaging options include boxes and bulk shipment.

	END USE BENEFIT	PROCESSING BENEFIT
MATERIAL PERFORMANCE	<ul style="list-style-type: none"> • RTI rating of 105°C with impact for applications requiring UL listed materials. • Inherent UL 94 5Va performance for applications requiring low flame spread. • Broad chemical resistance for use in corrosive environments, for example, in presence of strong acids and bases. 	<ul style="list-style-type: none"> • Low die swell for near net-shape tools and expedited balancing. • Excellent metal release and PVC like melt temperatures promote long run lives. • Suitable for common secondary operations such as machining and painting.
COST	<ul style="list-style-type: none"> • Tight dimensional tolerances during processing for parts consolidation. • Multiple polymer co-extrusion capability for further parts consolidation. 	<ul style="list-style-type: none"> • Enhanced metal release and processing stability for greater tool life. • Post-processor recyclable for efficient material usage.
QUALITY	<ul style="list-style-type: none"> • Improved processability produces consistent looking parts. • Smooth and polished finish for a high quality appearance part. 	<ul style="list-style-type: none"> • Wide processing window produces consistent looking part in high and low shear conditions. • Low extruded-in stress for reduced stress relaxation.

PROPERTY TABLE ON REVERSE SIDE

Mar 28, 2008

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. THE SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation, nor as an inducement to practice any patented invention without permission of the patent owner.

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PROPERTY	TEST METHOD	TYPICAL VALUES FOR TESTED LOTS EE105		UNITS
THERMAL Heat deflection under load 264 psi, 1/8" bar unannealed Vicat Softening, method B (1kg) Coefficient of thermal expansion -30 to +30°C	ASTM D-648 ASTM D-1525 ASTM D-696	217 103 261 127 4.0 7.3		°F °C °F °C $\times 10^{-5}$ in/in-°F $\times 10^{-5}$ cm/cm-°C
ELECTRICAL Relative thermal index (RTI) Electrical Mechanical w/o impact Mechanical w/ impact Hot wire ignition (HWI) High amp ignition (HAI) High voltage track resistance (HVTR) Arc resistance Comparative track index (CTI)	 UL 746B / ASTM D-638 UL 746A / ASTM D-638 UL 746A / ASTM D-1822 UL 746A / ASTM D-3874 UL 746A UL 746A UL 746A / ASTM D-495 UL 746A / ASTM D-3638	0.040 in / 1mm 105 105 105 2 0 - - -	0.120 in / 3mm 105 105 105 1 0 4 6 4	 °C °C °C plc plc plc plc plc
MECHANICAL Tensile strength (73°F / 23°C) At yield Tensile modulus (73°F / 23°C) Flexural strength (73°F / 23°C) Flexural modulus (73°F / 23°C) Hardness, Rockwell R	ASTM D-638 ASTM D-638 ASTM D-790 ASTM D-790 ASTM D-785	6,500 45 326,000 2,250 12,000 82 335,000 2,300 112		psi MPa psi Mpa psi Mpa psi MPa
IMPACT Notched izod 1/8" bar @ 73°F Variable height 3/8" diameter TUP @ 73°F	ASTM D-256 ASTM D-4226	5.4 290 0.9 4		ft-lb/in J/m in-lb/mil kJ/m
PHYSICAL Specific gravity Black 293 White 110 Gray 240 Natural 021 White 135	ASTM D-792	1.50 1.52 1.52 1.47 1.63		
FLAMMABILITY V-0 5Va	UL 94 UL 94	0.040 in / 1.0 mm min 0.060 in / 1.5 mm min		