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LUC-4105
SUPER LOWEX CASTING SYSTEM
REPRODUCTION URETHANE - SLOW
COLOR: GRAY

0302

DESCRIPTION

SUPER LOWEX LUC-4105 is a rigid urethane polymeric system developed to create a low exotherm, fast set casting system with "safety OSHA handling" characteristics that can be used in same day tooling and reproduction applications. LUC-4105 meets the current and future demands for today's principal of "just in time" tooling and manufacturing requirements. LUC-4105 is an easy to use system and offers a low mixed viscosity with exceptional air release. The fast set chemistry and low exotherm on cure in thicknesses from 1/8" to 10" produce an exceptional duplication with a tough, durable surface to produce a dimensionally accurate casting or reproduction with "nil" shrinkage. The set fast curing capabilities of LUC-4105 make it possible to demold within 2 hours. **(NOTE:** Larger casts will reach a demoldable state quicker than a smaller cast).

APPLICATIONS

Prototype parts	Duplicating mandrels	Tracer models
Matchplate fixtures	Latex molds	Core boxes
Nesting fixtures	Vacuum form molds	Trim fixtures
Production parts	Pattern & core duplications	

HANDLING CHARACTERISTICS @ 25°C/77°F

Mix Ratio (by weight or by volume)	100R/100H
Density	14.4 lbs/gal
.....	0.062 lbs/cu in
Mixed Viscosity	1,450 cps
Gel Time (500 gram)	10-12 minutes

PHYSICAL PROPERTIES

Tensile Strength (ASTM D-638.91).....	3,544 psi
Tensile Elongation (ASTM D-638.91).....	0.805%
Tensile Modulus (ASTM D-638.91).....	604,400 psi
Compressive Strength (ASTM D-695.91).....	7,321 psi
Compressive Modulus (ASTM D-695.91)	261,100 psi
Flexural Strength (ASTM D-790.92)	5,460 psi
Flexural Modulus (ASTM D-790.92)	835,500 psi
Cast Linear Shrinkage (ASTM D-2566.86).....	0.0002 in/in
Coefficient of Thermal Expansion (ASTM D-696.91).....	18.50 x 10 ⁻⁵ in/in °F
Glass Transition Temperature (Tg).....	177.6°C/351.7°F

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PHYSICAL PROPERTIES (cont.)

IZOD Impact (ASTM D-256.93a)	5.21 in-lb/in
Moisture Absorption 24 Hour (ASTM D-570.88)	0.304%
Shore D Hardness (ASTM D-2240.91)	80-82
Demold Time	2 hours
Machinability	Excellent
Finishing	Paintable
Shelf life (Store in tightly closed container at ambient temperature)	1 Year

*Super Lowex LUC-4105 will bond to itself. No bleed out or distillate color.

HANDLING & STORAGE

Part A and Part B of this system are moisture sensitive. Containers should be purged with dry nitrogen each time they are opened, unless the contents are used within one day.

MIXING INSTRUCTIONS FOR LOWEX LUC-4105

Stir components A & B separately until they are homogenous. The systems are color coded to insure a perfect mix. Pour equal parts of A & B into a mixing container and mix at slow speed with a variable speed drill motor for 30-60 seconds. Remove mixer and immediately pour into prepared mold. The total amount of material mixed should be poured within five minutes after mixing. If initial mix does not fill mold, mix additional material and complete the pour. LOWEX LUC-4105 can be cast against itself as it has excellent secondary bonding properties.

NOTE: LOWEX LUC-4105 **DOES NOT** CONTAIN TOLUENE Di-ISOCYANATE (TDI)