

ELASTO-THANE 230 LM

LOW-MODULUS POLYURETHANE JOINT SEALANT

1. PRODUCT NAME

ELASTO-THANE 230 LM is a low-modulus, one-part, non-sag, non-staining, polyurethane sealant which cures to a firm, flexible tear-resistant rubber. It is highly resilient and has excellent recovery characteristics, even after extended periods of compression or elongation.

2. MANUFACTURER

PACIFIC POLYMERS INTERNATIONAL, INC. 12271 Monarch Street Garden Grove, CA 92841 714/898-0025 FAX (714) 898-5687

3. PRODUCT DESCRIPTION

Composition: Moisture cured, polyurethane based joint sealant.

Basic Uses: For sealing and caulking all joints that are subject to high amounts of contraction and expansion, such as tilt-up panel joints. Bonds to concrete, wood, glass, and metal, without a primer in most applications.

Limitations: Containers that have been opened must be used up within one or two days since it is a moisture-reactive material. It sets up when exposed to air. All surfaces must be completely free of foreign matter. **White color may discolor from exposure to U.V. and also from fluorescent light.** Material should not be subjected to continuous immersion.

The maximum recommended depth is 1/2".

Colors: Concrete Grey, White, Tan, Off-White

Sizes: Available in 5-gallon pails, 10.5 oz. cartridges and 20.3 oz. (600ml) sausages

Standard: Federal Specification TT-S-230c. Type II, Class A.

ASTM C-920-87, Type S, Class 25, Use NT,M, and A.

Shelf Life: 6 months when stored indoors at 77°F and 50% R.H.

WARNINGS AND HAZARDS:

Before using the products, always refer to MSDS for important warnings and safety information. Use only in areas with adequate ventilation. Avoid breathing vapors. Keep away from heat and flame. Avoid contact with eyes and skin. In the event of skin contact, remove immediately and wash with warm, soapy water. Wear suitable eye protection. Always wash hands before eating.

4. TECHNICAL DATA

(See Page 3 for technical data.)

5. INSTALLATION

Joint Design: Suitable for all properly designed joints following accepted engineering practices.

Joint width must be a minimum of 4 times the anticipated movement. Do not exceed $\frac{1}{2}$ depth.

Surface Preparation: All joints must be absolutely clean and dry. For concrete, sandblasting is recommended. All curing compounds, old caulks, grease, waterproofing compounds, etc., must be removed. For non-porous surfaces such as glass, metal, etc, cleaning with M.E.K. or Toluene is recommended. Polyethylene rod or polyurethane foam is recommended as a joint-filler and back-up material. Fillers treated with bituminous products, grease or oil, should not be used. Where present, they must be removed or separated by vinyl tape or polyethylene film. Some surfaces may require the DECK-THANE PRIMER or METAL PRIMER.

Application: ELASTO-THANE 230 LM may be applied by open barrel caulking gun, hand-pressure-type. Press the sealant firmly into joint, using an appropriate tool, to assure good contact to the sides of the joint. Best if applied at temperatures below 100° F, but above 40° F.

Pacific Polymers International, Inc.

6. AVAILABILITY AND COST

ELASTO-THANE 230 LM is supplied through building material dealers. Prices vary with quantity and packaging. Quotations are made on request.

These products are designed and manufactured to be installed by professional installers familiar with surface preparation and application procedures. All others should consult a professional installer; those who choose to install these products without professional assistance do so at their own risk.

7. PRODUCT WARRANTY

Satisfactory results depend not only upon quality products but also upon factors beyond our control; methods of application and site conditions are examples of such factors and can affect product performance. This warranty consequently extends only to products installed in strict accordance with the manufacturer's specifications. It is the users responsibility to satisfy himself, by his own information and tests, of the suitability of the product for his own intended use; user assumes all risk and liability resulting from his use of the product. The substrate to which the product is applied must be sound structurally and otherwise. Structural or substrate failures or imperfections resulting in damage to or failure of the product are not covered by this warranty. Since the use of the product is beyond the control of the manufacturer, the manufacturer assumes no liability for misapplication and misuse of the product.

This warranty does not cover consequential damages, nor does it cover the labor attendant to replacing product in the event of a product failure. The warranty only extends to replacement of the product itself.

All products proven to be defective in manufacture will be replaced at no charge. Since the use of these products is beyond our control we cannot assume any risk or liability for results obtained, nor can we accept damages in excess of the purchase price of these products.

8. MAINTENANCE

If **ELASTO-THANE 230 LM** is damaged, and the joint has not been contaminated, it can be repaired by cutting out that part and resealing it with **ELASTO-THANE 230 LM**.

9. TECHNICAL SERVICES

All of the latest updates to product data and specifications are available at the Pacific Polymers International, Inc. website at <u>www.pacpoly.com</u>. Since product data and specifications change, it is the users responsibility to make certain the most current versions of product data and specifications are being used.

Technical assistance can be obtained by contacting:

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		1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"
DEPTH OF JOINT	1/4" 3/8" 1/2" 5/8" 3/4" 7/8" 1"	308	205 136	154 102 77	123 82 61 41	102 68 51 39 34	88 58 44 35 29 25	77 51 38 30 25 22 19

WIDTH OF JOINT

Linear Feet Per Gallon of ELASTO-THANE 230 LM

	mm	6.4	9.5	12.7	15.9	19	22.2	25.4
DEPTH OF JOINT IN MILLIMETERS	6.4 9.5 12.7	24.8	16.5 10.9 	12.4 8.2 6.2 r Meters	9.9 6.6 4.9 per Lite	8.2 5.5 4.1	7.1 4.7 3.5	6.2 4.1 3.0

4. TECHNICAL DATA- ELASTO-THANE 230 LM

PROPERTY	TEST METHOD	RESULTS
Consistency Type II	ASTM C-920	Non-Sag
Service Temperature Range		-40°F (-40°C) to 180°F (82.2°C)
Tackfree Time at 77°F (25°C); 50% R.H.	Fed. Spec. TT-S-230c	16-24 hrs.
Movement Capability	ASTM C-719	50%
Tensile Strength at 77°F (25°C)	ASTM D-412	125 psi
Rheological (sag in vertical displacement) at 120°F (49°C)	ASTM C-639	No sag
Extrudability	ASTM C-603	2 seconds
Weight Loss, after heat aging	ASTM C-792	9%
Cracking and Chalking, after heat aging	ASTM C-792	None
Stain and color change	ASTM C-510	Passes (no visible stain)
Bond Durability (±25% movement)	ASTM C-719	No Failure
(On glass, aluminum concrete)		
Accelerated Weathering	Atlas 6500 xenon arc model after 3000 hours	No elastomeric property damage
Cure Time at 77°F (25°C); 50% R.H.	Observed	4-7 days
% Elongation	ASTM D-412	700%
Shrinkage		Negligible
Hardness (Shore A)	ASTM D-2240	15 ± 5
Weight Per Gallon		12.0 ± 0.5 lbs.(5.4± 0.2 kg)