

# Black Panther™ 85

Flexible Black Repair Adhesive



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## PRODUCT OVERVIEW

Black Panther™ 85 is a two-component, fast curing liquid adhesive for repairing holes, tears and splits in steel / fabric corded rubber conveyor belts, providing high wear and abrasion resistance. It also provides a strong, flexible bond between a variety of substrates including plaster, wood, cement, stone, glass, hard plastics and a variety of metals. Working time is 3.5 minutes and cure time is 2.5 hours at room temperature (73° F / 23° C).

### TECHNICAL OVERVIEW

Mix Ratio: 1A:1B by volume, 100A:92B by weight	
Mixed Viscosity, cps: 5,400	(ASTM D-2393)
Specific Gravity, g/cc: 1.11	(ASTM D-1475)
Pot Life: 3.5 minutes (73°F/23°C)	(ASTM D-2471)
Cure time: 2.5 hours (73°F/23°C)	
Color: Black	
Shore A Hardness: 85A	(ASTM D-2240)
Tensile Strength, psi: 3,400	(ASTM D-412)
Elongation @ Break: 121%	(ASTM D-412)
Specific Volume: 25 cu. in./lb.	
Modulus, psi: 700	(ASTM D-412)
Die C Tear Strength, psi: 175	(ASTM D-624)
Shrinkage (in./in.): 0.0038	(ASTM D-2566)

\* All values measured after 7 days at 73°F/23°C

## PROCESSING RECOMMENDATIONS

### PREPARATION...

**Safety** - Use in a properly ventilated area ("room size" ventilation). Wear safety glasses, long sleeves and rubber gloves to minimize contamination risk. These products have a limited shelf life and should be used as soon as possible. Materials should be stored and used in a warm environment (73°F/23°C). All liquid urethanes will react with moisture in the air, causing bubbles. Use in a low humidity environment (below 50% RH). Mixing containers should have straight sides and a flat bottom. Mixing sticks should be flat and stiff with defined edges for scraping the sides and bottom of your mixing container. **Because no two applications are quite the same, a small test application to determine suitability for your project is recommended if performance of this material is in question.**

**Conveyor Belt Repair** - ensure that area to be repaired is free of grease, dirt, or moisture. Clean surface using a solvent. Approved solvents include (acetone, xylene, alcohol). Abrade surface to be bonded using an abrasive wheel or grinding disc. For holes, make sure to use duct tape to bridge holes and prevent adhesive leakage. Blow off any dust using oil-free compressed air. Clean the surface one more time using a solvent.

After mixing, apply the material using a spatula or flat edge tool as quickly as possible as it sets quickly. It is better to mix small amounts and add more material as needed. Partially cured material applied to the surface will not create a bond with suitable physical properties. A plastic spatula or a flat edged tool, are best methods for applying the material over a larger surface.

**Surface Preparation for Bonding Applications** - It is essential that the surface of both substrates to be bonded be absolutely clean and dry. Porous surfaces should be sanded until clean and any excess dust removed thoroughly. Non-porous surfaces should be degreased, dried and abraded by sanding, sandblasting or chemical etching - the etching being required for certain surfaces. Solvent wash the surface and let the solvent fully dry before applying adhesive.

## MEASURING & MIXING...

Stir Part A and Part B thoroughly before dispensing. After dispensing equal amounts of Parts A and B into mixing container, mix thoroughly for 30 - 45 seconds making sure that you scrape the sides and bottom of the mixing container several times.

## APPLYING, CURING & PERFORMANCE...

Pour on to prepared surface. Level (scrape off excess) using a spatula or flat edge tool. Position and affix other surface to substrate and clamp together for 2.5 hours at 73°F/23°C. Using in warm environments will reduce pot life and cure time. Cure time can be reduced by applying mild heat.

### Safety First!

The Safety Data Sheet (SDS) for this or any Smooth-On product should be read prior to use and is available upon request from Smooth-On. All Smooth-On products are safe to use if directions are read and followed carefully. **Keep Out of Reach of Children.**

**Part A** contains methylene diisocyanate (MDI). Vapors, which can be significant if material is heated or sprayed, cause lung damage and sensitization. Use only with adequate ventilation. Contact with skin and eyes may cause severe irritation. Flush eyes with water for 15 minutes and seek immediate medical attention. Remove from skin with waterless hand cleaner followed by soap and water Refer to SDS.

**Part B** is irritating to the eyes and skin. If contaminated, flush eyes with water for 15 minutes and seek immediate medical attention. Use only with adequate ventilation.

**IMPORTANT** - The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.



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is loaded with information about mold making, casting and more.

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