

## Thermoplastic Elastomers - Dermasol

**DESCRIPTION:** Dermasol is a series of soft, thermoplastic elastomers that feature high elongation properties. Thermoplastic elastomers, sometimes referred to as thermoplastic rubbers, are unique in that they combine the physical properties of rubber with the processing advantages of plastic. To mold Dermasol, it is heated to a temperature of ~350°F and then dispensed into a suitable, heat-resistant mold (e.g., 6061 aluminum or aluminum-filled epoxy molds).

Dermasol feels remarkably like human flesh and is especially useful for simulating human/animal tissue and body parts for medical and surgical training. Common end products include: medical models/surgical training aides, realistic body parts for prop making and special effects, soft crown protective halos and other protective parts, and specialty casts.

**BEFORE USE:** Thoroughly read Safety Data Sheets and product labels.

**MELT TEMPERATURE & PROCESSING:**

Temperature requirements may vary dependent on material volume, heating system, dispensing system and other processing elements. Please consult with Polytek® Development Corp. on appropriate processing temperatures and heating equipment prior to use.

**NOTE:**

Based on the processing equipment, volume, and residence time of material in heated state, the material could potentially start melting around 350°F.

**PACKAGING / PRODUCT CONSISTENCY:**

Dermasol is most often packaged and shipped in pails for ease of processing. The product arrives as a slush type consistency. Care must be taken to blend the material well before processing as phase separation may occur during shipping and storage.

**PRODUCT LINE FEATURES**

- **Type: Thermoplastic Elastomers**
- **Custom Color Matching**
- **Customizable Durometer (Shore OO20 to A25)**

**SHELF LIFE:** For best results, store products in unopened containers at room temperature (60-90°F/15-32°C). Use products within six months.

**DISCLAIMER:** The information in this bulletin and otherwise provided by Polytek® Development Corp. is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained by the use thereof, or that any such use will not infringe any patent. Before using, the user shall determine the suitability of the product for the intended use and user assumes all risk and liability whatsoever in connection therewith.

**This product is not classified as flammable or combustible but will burn under fire conditions. DO NOT EXCEED PROCESSING TEMPERATURES OF 500°F.**

**Polytek will customize your product for color and hardness.**

DERMASOL PHYSICAL PROPERTIES – Standard Products				
Product	DS-300	DS-302	DS-303	DS-309
Description	Flesh Medium	Clear Medium	Clear Hard	Clear Soft
Shore Hardness ASTM D2240	OO24 +/-2	OO24 +/-2	OO36 +/-2	OO16 +/-2
Color	Flesh	Clear	Clear	Clear