



POLYCOAT PRODUCTS

A Division of American Polymers Corp.

GREATER LOS ANGELES-14722 Spring Avenue - Santa Fe Springs, CA 90670
DALLAS / FT.WORTH METROPLEX-2100 Reliance Parkway - Bedford, TX 76021

Tel: (562) 802-8834
Fax: (562) 921-7363

www.Polycoat.com

PC 18 MOLDING SYSTEM

Typical Properties PC 18 A (ISO)

Viscosity, mPa·s @ 25°C:	1500-2000
Specific Gravity @ 25°C :	1.74
Appearance @ 25°C:	liquid

Typical Properties PC 18 B (polyol blend)

Viscosity, mPa·s @ 80°C:	1800-2300
Specific Gravity @ 25°C :	1.74
Appearance @ 25°C:	viscous liquid

Typical Physical Properties		
Density, lbs/ft ³	ASTM D-1622	107.5
Compressive strength, psi	ASTM- D2370	8000

Product Description:

The PC 18 casting materials are a solid cast two-component urethane system. The PC 18 systems are designed for ease of application and de-mold rates of 15 minutes to 60 minutes depending on gel time.

The gel time on the two PC 18 systems is 4 and 9 minutes, and the hardness exceeds 80 shore D. The product contains components that will settle out of solution; Therefore, both A and B must be thoroughly mixed separately before using. Only mix as much material as will be used, as the pot life is fairly short. Mix for up to 2 minutes before pouring. Working time for 9-minute gel material is about 4 minutes and 2 minutes for 4 minute gel material.

Reactivity Profile	4-min gel	8-min gel
Mix ratio by weight A/B	100/100	100/100
Gel Time @ 74° F, Min.	4	9
De-Mold Time, Min.	15	60
Shrinkage (in./in.)	0.005	0.005
Finished color	Gray	Gray

Recommended Uses:

The PC 18 systems are designed for use in making parts or molds with thin or thick cross section, sharp patterns or contours. Cured parts can be machined or painted and have excellent water resistance. PC 18 can replace epoxy resins for many applications. It is typically used for producing vacuum forming molds as well as molds for open pour processes.

Storage and Handling:

Containers for both A and B components should be kept tightly closed to prevent moisture contamination. Do not reseal if contamination is suspected. Use of a dry nitrogen blanket for partial drums is recommended. Component B may be stored at ambient temperatures. Storage for Component A should be maintained between 77°F (25°C) and 95°F (35°C). For best results, this product should not be allowed to freeze, although it may be re-heated in a well ventilated oven for a period of time to re-liquefy solid particles. To avoid product degradation, product temperature during re-heating should not exceed 140°F (60°C). An additional note of caution is that exposure to temperatures over 400°F (204°C) can create excessive pressure potentially causing containers to rupture. Do not breathe aerosol or vapors and avoid contact with skin and eyes. Exposure to vapors of heated MDI can be dangerous. To heat product properly, use well ventilated convection ovens or other methods that distribute heat evenly. Avoid using drum heaters or other



POLYCOAT PRODUCTS

A Division of American Polymers Corp.

GREATER LOS ANGELES—14722 Spring Avenue - Santa Fe Springs, CA 90670
DALLAS / FT.WORTH METROPLEX—2100 Reliance Parkway - Bedford, TX 76021

Tel: (562) 802-8834
Fax: (562) 921-7363

www.Polycoat.com

heat sources that may cause excessive local heating.

Health and Safety Information:

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling any of the products listed above. Before working with these products, it is your responsibility to read and become familiar with the available information on its hazards, proper use and handling. This is extremely important and cannot be overemphasized.

Information is available in several forms, e.g. material safety data sheets and product labels. To obtain this information, contact your Polycoat Product, Inc. representative.

WARRANTY: The information herein is believed to be accurate and reliable as of the date of issuance, but is subject to change without prior notice. It is up to the User to contact Polycoat Product to verify the correctness prior to ordering or specifying this product. Polycoat Product warrants this product for merchantable quality only, does not warranty against unknown risks that may or may not be present, nor do we assume any responsibility for coverage, performance, or injuries resulting from the use of this product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY POLYCOAT PRODUCT EXPRESSED OR IMPLIED, STATUTORY, BY OPERATION OR LAW, OR OTHERWISE, INCLUDING MARKETABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Failure to strictly adhere to recommended procedures shall relieve Polycoat Product of all liability with respect to the product or the use thereof. The buyer assumes all risks whatsoever as to the use of these products and the Buyer's exclusive remedy as to any breach of warranty or negligence claim shall be limited to the purchase price of the materials and agrees that any and all litigation proceedings shall be according to the laws of California and shall be filed in the County of Santa Fe Spring, CA. Each person, firm, or corporation engaged in the application installation, disposal or any other use of the any of these products shall carefully determine whether there is a potential hazard associated with such product in a specific usage, and utilize all appropriate precautionary and safety measures as outlined in Local, State and Federal regulations governing the use or disposal of these products or the construction and/or renovation of structures.