

Product Bulletin

CASS POLYMERS

ADTECH
Plastic Systems
SC-2001 Registered



Phone: 800 344 7776
Fax: 248 588 5909
815 West Shepherd Street
Charlotte, MI 48813-0523
plastic@casspolymers.com
www.casspolymers.com

NO. 17
HIGH HEAT RESISTANT
RIGID
GRAY - BLACK - WHITE

0302

DESCRIPTION

No. 17 HIGH HEAT RESISTANT FILLER set-fast system has uses in aerospace, aircraft, automotive, tooling, manufacturing and final fabrication where potential exposure to elevated temperatures up to 230°C/446°F have to be tolerated either for short term or continuous periods. No. 17 offers the user a smooth workable paste with set-fast cure to expedite those applications for repair or finish. No. 17 can be applied with a squeegee, spatula or flat tool. The cured material can be finished by mechanical sanding, grinding, scraping, etc., to a feather edge. This filler has excellent adhesive and bond strength to fiberglass, SMC, BMC, RIM, FRP, epoxy, graphite and Kevlar® composites as well as aluminum, plaster and other substrates. No. 17 HIGH HEAT RESISTANT FILLER when cured and finished accepts virtually all types of coatings and decorative films without any blush or discoloration.

USES

- Aircraft interior panels
- FRP panels-filling cloth imprint
- Nose cone porosity
- Edge filling on honeycomb
- Many other applications
- Changes & repairs to vacuum form molds
- Drill fixtures, potting bushings
- Gel-coat repairs on production molds
- SMC mold porosity in molded parts

HANDLING CHARACTERISTICS @ 25°C/77°F, 100 gram mass

Mix Ratio (parts by weight) 100R/2H
Mixed Consistency..... Smooth Creamy paste
Work Life 4-6 minutes
Density..... 12.75 lbs/gal
..... 0.055 lbs/cu in
Finish Schedule 15 minutes
Color Gray, White or Black

PHYSICAL PROPERTIES

Ultimate Tensile Strength (ASTM D-638.91) 4074 psi
Tensile Elongation (ASTM D-638.91) 1.163%
Ultimate Flexural Strength (ASTM D-790.92) 7,080 psi
Ultimate Compressive Strength (ASTM D-695.91) 8,992 psi
Shrinkage (Cast Bar) (ASTM D-2566.86) 0.00982 in/in
Coefficient of Thermal Expansion (ASTM D-696-91) 25.4 x 10⁻⁶ in/in°F
Moisture Absorption (ASTM D-570.81) 0.149%
Cured Hardness 80 Shore D
Shelf Life (Stored At Ambient Temperature) 6 months

Continue on Back

SELLER CANNOT ANTICIPATE ALL CONDITIONS UNDER WHICH SELLER'S PRODUCTS, OR THE PRODUCTS OF OTHER MANUFACTURERS IN COMBINATION WITH SELLER'S PRODUCTS, MAY BE USED. SELLER ACCEPTS NO RESPONSIBILITY FOR RESULTS OBTAINED BY THE APPLICATIONS OF SELLER'S PRODUCTS OR THE SAFETY AND SUITABILITY OF SELLER'S PRODUCTS, EITHER ALONE OR IN COMBINATION WITH OTHER PRODUCTS. USERS ARE ADVISED TO MAKE THEIR OWN TEST TO DETERMINE THE SAFETY AND SUITABILITY OF EACH SUCH PRODUCT OR PRODUCT COMBINATION FOR THEIR OWN PURPOSES. UNLESS OTHERWISE AGREED IN WRITING, SELLER DELIVERS THE PRODUCTS WITHOUT WARRANTY OF ANY NATURE, STATED OR IMPLIED, AND BUYERS AND USERS ASSUME ALL RESPONSIBILITY AND LIABILITY FOR LOSS OR DAMAGE ARISING FROM THE HANDLING AND USE OF SAID PRODUCTS, WHETHER USED ALONE OR IN COMBINATION WITH OTHER PRODUCTS. PURCHASER WAIVES ANY CLAIM AGAINST SELLER FOR DIRECT, INDIRECT, CONSEQUENTIAL OR EXEMPLARY DAMAGES AGAINST SELLER, INCLUDING WITHOUT LIMITATION, DAMAGE WHICH MAY OCCUR AS A RESULT OF PURCHASER'S USE OR MISUSE OF THE PRODUCT OR THE PRODUCT'S FAILURE TO CONFORM TO ANY PARTICULAR SPECIFICATIONS.

NOTE: All high heat resistant systems typically exhibit a slight color change at the extreme end of the elevated temperature range when used in tooling repairs.

®Registered trademark of E.I. DuPont deNemours

MIXING INSTRUCTIONS

1. Stir contents of can thoroughly using a spatula or putty knife. Place the required amount of filler and cream hardener on a disposable clean surface.
2. Mix ratio: 100 parts paste to 2 parts cream hardener by weight, i.e. size of golf ball (paste) to a two inch strip of catalyst.
3. Set up time of mix at room temperature will be 5-10 minutes and may be adjusted faster or slower by increasing or decreasing the amount of hardener.
CAUTION: THE USE OF TOO MUCH HARDENER CAN CAUSE GUMMINESS IN THE FILLER.
4. After 15-20 minutes the filler may be filed or sanded to final finish.

CHEMICAL RESISTANCE GUIDE

ADTECH Ultra Filler No. 17 combines saturated and unsaturated Polyester resins of medium to high reactivity. As an aid to the user, chemical resistance evaluations were conducted, using a modification of ASTM 0543-60T.

PROCEDURE:

Samples nominally sized at 1/2" x 1" x 4" were immersed halfway in 4 ounces of reagent and stored for 12 months at ambient temperature. Reagents were swirled monthly, and specimens were rated every 4 weeks.

Rating Results:

Excellent, No Visible Attack

Benzene
Gasoline
Methanol
Mineral Spirits
Water (Distilled)

Good, Very Slight Attack

Acetic Acid (5%)
Citric Acid
Hydrochloric Acid (10%)
Nitric Acid (10%)
Sodium Hydroxide (5%)
Sulfuric Acid (10%)

Not Recommended

Acetone