



AP Fill 700

Water activated semi-rigid polyurethane foam injection resin.

Description Single component, water activated, hydrophobic, low viscosity, closed cell polyurethane injection resin.

Applications

- Cutting off high flow leaks.
- Filling voids behind concrete structures.
- Cutting off underground water flows.
- Consolidating loose soil.
- Seawall repair.

Advantages

- Very low viscosity.
- Water impermeable.
- Adjustable set time – as fast as 20 seconds.
- Injected as a single component.
- Phthalate free (more environmentally friendly).
- Certified to NSF 61-5 (Approved for contact with drinking water).



Certified to NSF 61-5
Approved for Contact
with Drinking Water

Packaging 5 Gallon Pails, 50 Gallon Drums, 250 Gallon Totes

Physical Properties 77° F (25° C) - Liquid
Viscosity 110-130 Centipoise.

Physical Properties - Cured

Tensile Strength	(ASTM D-1623)	43 p.s.i.
Tensile Elongation	(ASTM D-1623)	2.9%
Shrinkage	(ASTM D-1042/D-756)	None
Compressive Strength (with fine sand)	(ASTM C-39)	2,050 p.s.i.

Expansion
Up to 30x expansion (free foam)

Properties will vary depending on application conditions.

Reaction Times

AP Cat 106 (Not recommended to use below 2%)

Quantity by Volume	2%	5%	10%
Initial Reaction	25 sec	15 sec	8 sec
Full Rise	1 min 50 sec	1 min 27 sec	30 sec

AP Cat 107 (Not recommended to use below 5%)

Quantity by Volume	5%	7.5%	10%
Initial Reaction	5 sec	5 sec	5 sec
Full Rise	30 sec	22 sec	16 sec

Material Prep Condition overnight to 70° - 80° F (21° - 26° C). If using less than full pail, pre-mix material prior to adding AP Cat 106.

Mixing AP Fill 700 requires catalyst (AP Cat 106 or AP Cat 107). Mix only the amount of material to be used within a few hours. Use a low speed drill with a mixing paddle. Pour in AP Cat while mixing. Be careful not to whip too much air into the mixture. Wear safety glasses or goggles whenever handling or mixing chemicals. AP Cat can cause burns to skin or eyes with direct contact. Keep container covered to prevent water entry.

FILLVOIDS SEALLEAKS

Equipment	Single component airless sprayer recommended.
Accessories	AP Cat 106 (Regular Speed), AP Cat 107 (Fast Speed), AP Flush 121
Personal Protection	Safety goggles, face shield, impermeable gloves, long sleeves and pants. Use in well ventilated areas. Open doors and windows. In confined areas use mechanical ventilation to keep vapor concentrations low. Prevent direct contact with skin and eyes. See MSDS.
Clean Up	Flush injection equipment with AP Flush 121 when necessary. Remove cured material from metal components by soaking in AP Soak 130. Clean off of skin with soap and water.
Environmental Protection	Cured material is chemically inert and safe to dispose of in landfill. Cleanup any spilled liquid resin and place in a suitable sealed container. Dispose of in accordance to applicable environmental regulations.
First Aid	Eye Contact: Immediately flush with large amounts of water. Seek medical attention. Inhalation: Move to fresh air if symptoms occur. If breathing is difficult, seek medical attention. Ingestion: Seek medical attention immediately. Skin Contact: Wipe off contaminated area and wash with soap and water.
Limitations	Low temperatures will increase viscosity making product more difficult to pump. Low temperatures or cold water will slow down the reaction time. pH of reaction water should be between 3 and 10 for optimum foam. Keep lid tightly closed. Requires catalyst.
Storage	Store between 50° - 80° F (10° - 26° C).
Handling	Keep lids on tightly to prevent moisture from entering containers. Avoid direct contact with product. Be careful when opening as pressure may build up inside containers.
Limited Warranty	Alchemy Polymers warrants this product to be free from manufacturer's defects and to meet all published properties on current Technical Data Sheet for a period of one year if used according to published instructions and within the shelf life. The user is responsible for determining suitability for intended use and assumes all risk. No other warranties expressed or implied shall apply including any warranty of merchantability or fitness for a particular purpose. Purchaser's sole remedy is limited to the purchase price or product replacement exclusive of cost of labor or other materials.
Latest Information	Before each use read latest Technical Data Sheets, Material Safety Data Sheets, and instructions available at www.alchemypolymers.com . Nothing contained in any Alchemy Polymers materials or verbal instruction relieves the user of the obligation to read and follow all usage instructions and warnings for each product contained in the latest Technical Data Sheets and Material Safety Data Sheets. All information given by Alchemy Polymers about Alchemy Polymers products and procedures is given in good faith based on our current experience level and knowledge when materials are properly stored, handled, and applied. Jobsite conditions always vary, and for this reason Alchemy Polymers assumes no liability for the provision of such information or instructions. Neither shall any legal relationship be created by the provision of such information.

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