

Polywater® AFT™ comes in a familiar aerosol package. Because it is easy to use, the end user may ignore or only lightly skim the instructions. If installation directions are missed, the result may be a foam that is not well mixed or not fully expanded. Here is what Polywater AFT should look like if properly dispensed.

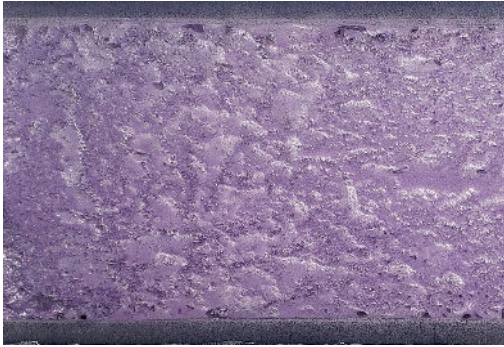


Photo 1: Cross-section of cured Polywater AFT in conduit. Note small pore size.



Photo 2: Cured Polywater AFT allowed to rise freely, in bucket

Application Problems/Solutions

The following examples illustrate Polywater AFT application issues with suggested corrections and responses.

1. Actuator is not fully depressed

When only a small amount of material is desired, it is tempting to lightly press the actuator. This results in product that is not well mixed. It will sputter and spit. Dark purple and white foam will come out.



Photo 3: Actuator partially depressed, initial material.



Photo 4: Actuator partially depressed, 2nd injection.

Polywater AFT will not be well mixed and will shrink. The foam should be removed and discarded. If actuator is fully depressed during the next injection, Polywater AFT will perform to standard.

2. Can is not held upside down

Can is well marked with instructions to hold it upside down. If Polywater AFT is dispensed upright, it tends to start with a sputtering action that usually clues the user to the problem. The sputtering lasts about 5 seconds. Initial material is purple. In 5 to 15 seconds, only white foam will dispense.



Photo 5: Can held right-side up. Polywater AFT is poorly mixed. Full can dispensed.



Photo 6: Can held right-side up. First part of Polywater AFT comes out purple but not mixed properly.



Photo 7: Can held right-side up. Second part of Polywater AFT comes out white Part A only.

Polywater AFT will not be well mixed and should be removed and discarded. Remaining material in can will be off-ratio. It should be dispensed for proper disposal.

3. Plugged nozzle, broken actuator or insert

The actuator is *reusable* for approximately 10 seconds after use. However, it should be replaced between each use because it is easy to lose track of time.



Photo 8: Creamy tan Part A Resin only, Part B side plugged or insert broken.



Photo 9: Part B Dark purple Curing Agent only. Part A side plugged or insert broken.



Photo 10: Good nozzle on the left. Broken nozzle on the right.



Photo 11: Plugged opening in can.

Actuator and nozzle assembly is likely plugged or the tip that goes in the can is plugged/broken. Can should be disposed according to local regulations.

4. Nozzle Blockage

Because Polywater AFT cures quickly, the nozzle can become blocked approximately 10 seconds after use. The two possible results of a clogged nozzle are that nothing will dispense or just one side will spray. Blocked foam can lift the nozzle off the can and material will foam around the openings, or the tube will come off the nozzle and make a mess.



Photo 12: Blocked foam dispensed on top of can



Photo 13: Plugged tube popped off nozzle.



Photo 14: Polywater AFT with no tube on nozzle.

5. Deployed outside temperature use range of 45°F to 95°F (7°C to 35°C)

Below 45°F (7°C), Polywater AFT becomes more viscous. It dispenses slowly and does not mix properly. Above 95°F (35°C), Polywater AFT cures so quickly it may not have time to flow between cables to fully seal the conduit. ***Never allow the Polywater AFT Aerosol can to exceed 122°F (50°C), as it may burst.***



Photo 15: Polywater AFT too cold. Did not mix.



Photo 16: Polywater AFT too hot. Cured quickly.

Leaving Polywater AFT in a vehicle may bring it outside the recommended temperature range. Allow Polywater AFT to come into the proper temperature range for at least 2 hours before use. Once the Polywater AFT is in temperature range, it should perform to standard. (Freezing is not recommended.)