Instructions for Polysulfide Sealant Removal Using PolyGone® 310-AG Liquid or Gel

**Note:** Before using PolyGone 310-AG, consult the MSDS for proper personal protective equipment. See the Technical Data Sheet for additional information.

1) PolyGone 310-AG fully removes cured polysulfide sealant (PRC, Flamemaster, and A.C. Tech) via a chemical reaction, from aircraft structures and components. As the reaction between PolyGone and the polysulfide is a chemical reaction, temperature is very important. We recommend a minimum temperature of 70°F and a maximum temperature of 105°F. PolyGone 310-AG is available in both liquid and gel formulations. The liquid product is designed for parts that can be immersed in the liquid such as, fasteners, clecos, and access panels. The gel is suited for parts that cannot be immersed, vertical surfaces, inverted surfaces, or while inside a fuel tank.

2) **CAUTION:** Avoid contact with non-stretched acrylic transparencies due to potential crazing. This type is typically found on non-pressurized aircraft. Acrylic windows on pressurized aircraft are will not craze with PolyGone. Also, avoid contact with painted surfaces. PolyGone may have a negative effect on painted surfaces depending on the age, type, and manufacturer of the paint. We recommend testing in a small area prior to extensive exposure.

3) To clean small components i.e. fasteners and clecos, fill a suitable container (stainless steel or HDPE) with PolyGone 310-AG and completely immerse the component(s) until the sealant is digested. To enhance the performance of the PolyGone, RPM recommends a gentle agitation while soaking. Once the parts are clean, they can be rinsed with eOx AC (see Step 6) and dried. The eOx AC is a surfactanated cleaner that quickly breaks down the PolyGone for easy rinsing. If your operation requires cleaning large amounts of small parts, please contact RPM Technology for additional information on large-scale cleaning operations. **Note:** To extend the life of the PolyGone, the vessel must remain covered at all times.

4) To remove sealant from larger parts or to remove sealant inside the fuel tank, apply PolyGone 310-AG Gel directly and liberally onto the cured sealant using a stiff non-metallic brush. See photo at right. Remember apply “like icing on a cake, not buttering toast!”

   a) Mooney Supplement: If you are working on a Mooney that has never been completely resealed, then you must remove the reddish buna-n lining first. This is accomplished by scoring the surface in long “linguini” strips with a razor blade prior to gel application. These cuts enable to PolyGone to wick underneath to begin depolymerizing the polysulfide. Once this occurs, the buna-n has nothing to adhere to and is easily removed. Squeeze the PolyGone off the buna-n, then spread the gel out on the surface and continue.

5) Agitate the Gel with the non-metallic brush every 45-60 minutes for 4 hours. After this time, the Gel is completely reacted. Wipe the Gel off the surface and with a plastic
scraper (PolyScraper) remove all loose sealant. If sealant remains, repeat until the sealant is gone. The removal time for PolyGone 310-AG Gel depends on the thickness, type of polysulfide sealant, age, and temperature. When all the sealant is removed, remove all traces of PolyGone 310-AG Gel by rinsing the area with eOx AC (see Step 6). If necessary repeat steps 3 and 5 to ensure all polysulfide sealant material is removed.

6) Alternatively, the Gel can be liberally applied and left overnight once the buna-n liner is removed. The Gel will continue break down the polysulfide sealant. This method will not break it down to wipe away like the hourly stirring method, but the sealant will be sufficiently compromised to enable it to be scrapped away with less effort.

7) eOx AC (Aircraft Cleaner) is a water based, non-toxic, cleaning agent that removes uncured polysulfide, grease, oil, brake dust, “blue” stains, mastics, and carbon. eOx AC is the complementing product that removes all residues of PolyGone 310-AG and polysulfide sealants after applying PolyGone 310-AG. **Note:** Before using eOx AC, consult the MSDS for proper personal protective equipment.

8) Smaller parts may be rinsed via a separate rinse tank, or by being sprayed and wiped dry using an approved lint free cloth. To remove traces of the PolyGone Gel and sealant, apply eOx AC by spraying directly onto the area and wiping dry. **CAUTION:** Initially avoid all contact with transparencies due to possible crazing since some active PolyGone may exist and react with the transparency.

9) For general cleanup after applying polysulfide sealant, eOx AC can be used to clean tooling and sealant containers as needed prior to the sealant curing.

10) **PolyWipes** - Are lint free wipes that are impregnated with a water-based cleaning agent. PolyWipes are packaged in a convenient 150-wipe resealable tub container. PolyWipes are non-toxic, non-hazardous and are safe for removal of uncured polysulfide sealants and silicone on aircraft structure/components, tooling, and hands. **Note:** Before using PolyWipes, consult the MSDS for proper personal protective equipment.

11) Before using the PolyWipes, thoroughly saturate wipes by shaking tub before opening. Open the container, pull out a wipe, and tear at the perforation.

12) To remove the uncured polysulfide sealant or silicone, place a wipe between you thumb and index finger. Place the wipe over the sealant and while pressing down flick you hand over the surface and up. Fold the wiper on itself and repeat until the surface is free of sealant residue.

13) **Storage:** Keep unused PolyGone 310-AG, PolyGone 310-AG Gel, eOx AC, and PolyWipes in their original containers. Tightly close all containers and store them in a cool, dry, well-ventilated area. The products are not classified as hazardous and do not require storage in a hazardous cabinet. For material in a cleaning tank, make sure the cover is in place when not in use. We recommend a buna-n or Teflon gasket on the lid.

14) **Disposal:** Since the PolyGone is contaminated with polysulfide, we recommend disposal with other hazardous solvents. However, your local environmental representative can advise you based on local regulations.

15) **Available package sizes:**
   a) PolyGone 310-AG: 1-gallon poly, 4 x 1-gallon case, and 55-gallon steel drum
   b) PolyGone 310-AG Gel: 6-oz. poly container, 12 x 6-oz. case, 5-pound poly bucket
c) eOx AC: 1-quart poly, 12 x 1-quart case, 1-gallon poly, 4 x 1-gallon case, 60-gallon poly drum

  d) PolyWipes: 150 wipes per tub

16) Please direct any questions or comments regarding any of these products or application procedures to:

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