



POLYMONOCHLOROTRIFLUOROETHYLENE,
POLYTETRAFLUOROETHYLENE, TETRAFLUOROETHYLENE
FLUOROCARBON and POLYVINYLFLUORIDE

CHEMICAL TREATMENT

A fluorinated polymer can be bonded only after its surface has been pretreated by flame oxidation, exposure to sodium dispersions, or a similar polarizing technique. These plastics in pretreated form are available from most suppliers. However if you wish to treat the material yourself use the following procedure:

1. Prepare a solution of:

	<u>pbw</u>
Sodium Metal	23
Naphthalene	128
Tetrahydrofuran, technical grade	860

Place the tetrahydrofuran in a 2-litre (67oz) flash having a drying tube outlet and a mercury-sealed stirrer. This configuration is necessary because the resulting solution reacts violently to water. After dissolving the naphthalene, carefully add $\frac{1}{4}$ to $\frac{1}{2}$ inch cubes of sodium, dissolving one cube a time while stirring. Let the solution stand for 16 hours at room temperature, then stir for another 2 hours. The dark brown liquid that results should be stored in bottles with glass stoppers to keep out air and moisture. All work should be done near an exhaust ventilator.

2. Degrease the plastic with acetone or M.E.K.
3. Immerse the plastic for 15 minutes in the sodium solution at room temperature. Retrieve with tongs.
4. Wash the plastic in acetone or M.E.K. to remove excess organic material then in cold, distilled or deionised water to dissolve sodium salts.
5. Dry the plastic thoroughly.

Note : Proprietary chemicals may also be used to treat these plastics.

LORD INDIA CHEMICAL PRODUCTS PVT.LTD.

601, Tulsiani Chambers,
212 Backbay Reclamation,
Nariman Point MUMBAI – 400 021
Tel. : +91-22- 56325321 Fax : +91-22-56325330
Email : chemlok@lordindia.com