## GREASING GROUND GLASS JOINTS



Typical grease used to seal ground glass joints

When using equipment with ground glass joints, each standard taper ground glass joint should be <u>lightly</u> greased with stopcock grease to ensure that the joints do not "freeze" together. Grease should always be used for:

- vacuum set-ups
- when strong base is being used
- when the reaction is to be heated above 150  $^{\circ}$ C, or,
- if the joints needed to be rotated while in use.

A short <u>video</u> on the application of grease to ground glass joints is available. The grease should be used only sparingly by applying thin streaks to the top (wider) half of the male joint and then seat the joint by rotating gently. When properly seated, greased, and clamped, the joint should appear to be nearly transparent (compare the two joints in the photograph shown below or at the end of the <u>video</u>).

Do not apply too much grease and make sure that the grease does not spread in to the apparatus beyond the area of the joint, otherwise the grease can become dissolved in your solvent and contaminate your sample.

Tip: Large excesses of grease can be wiped off. If you need to remove all traces of grease from a joint, a wipe with a few drops of dichloromethane on it works very well.

(1) apply a thin film of grease to this side of the joint





(3) carefully rotate th pieces in order to creae spread the grease evenly



Look at the difference between the two joints. The one on the left has been greased and the resulting joint is almost transparent while the one on the right is ungreased and the result joint area is opaque.