Animal - Epon Fix & Embed

Procedure for fixing and embedding animal tissue with Epon Resin

**Protective Equipment**; Safety glasses, Lab coat, gloves and Chemical Fume hood

Remember to **label all vials** with; sample name, fixative type, your name & date

Primary Fixation:

2- 4% Paraformaldehyde/2% - 3% Glutaraldehyde Overnight, 4° C

 in 0.1 M Phosphate

 and/or

Microwave fix (**optional**) – primary fixative for 2.5 minutes, Power: 250 W, Cut off temp 28° C

 Rest at room temperature 5 minutes

Rinse: With buffer 3x 5 – 10 min ea

Secondary fixation(optional):

Osmium tetroxide (1-2%) 2% -1h room temp (r.t.), Or 1% - overnight 4° C

Rinse: With ddH2O after OsO4 3x 5 -10 mins each

Dehydration:

30% Ethanol 10 mins

 50% Ethanol 10 mins

 70% Ethanol 10 mins

 95% Ethanol 10 mins

 100% Ethanol 10 mins

 100% Acetone 3x,10 mins ea

Infiltration: :

 1 drop DMP-30 : 1 ml Epon resin

 Epon : Acetone

 1 : 1 1 h to overnight

100% Epon 1 h to overnight

Embedding: Change resin just before embedding in molds. Place paper label in mold, then sample

Curing/Polymerization: Overnight in oven in hood.**Warning**: Don’t leave sample in Epon (without changing) for more than one night as polymerization may occur. Change resin just before embedding.