Buffer

The use of cacodylate buffer (Na(CH$_3$)2AsO$_2$) avoids the presence of extraneous phosphates which may precipitate out in the later staining procedure with uranyl acetate. The buffer also has a good range within which the pH is stable. Be careful: The buffer is not volatile and can be opened out of the fume hood but it contains arsenic so should not be spilled or imbibed.

Amino acid-containing buffers are not used with glutaraldehyde since they can be expected to react with aldehyde. Phosphate buffers are used for immuno labelling as cacodylate buffer may affect the antibody.

1. Stock solution is 0.2M sodium cacodylate (MW 214.02)
2. Dissolve 3.29 g in 100 mls ddw. Adjust pH with HCl