

WATER TANK GUIDE

DRINKING WATER TANKS

Resin "A": Laminating Resin: Use our standard Resin "A": BIP 864E. This resin contains no Amin: ("DMA") The accelerator is purely Cobalt.

Final surface coat on inside of tanks: use the white-pigmented Gel Coat: CVP 6322-101. This Gel has been approved by the French Water Authority for this purpose. As with all Gel Coat resins used as final surface coat, Solution "M/W": Wax in Styrene: must be added to the Gel in ratio 2%: i.e. at 10 cc's per lb Gel (approx. $\frac{3}{4}$ pint): to avoid Gel remaining surface-tacky when hard. Spread rate of gel is 2½ ozs/sq.ft.

Allow adequate cure-time: up to one week at 16C temp. Then flush out with hot water/steam to remove any residual styrene from the GRP sheathing. Styrene would taint flavour but would not be toxic to humans. It would be toxic to live fish: as they breathe the water.

STEEL/ALUMINIUM TANKS

A coat of "G.4." polyurethane varnish should be applied first as this adheres to metal better than does polyester resin. Spread rate approx. 200 grs/sq.m. Unlike oil-based varnishes that require a warm dry atmosphere to evaporate the solvents: "G.4." hardens upon contact with moisture present in atmosphere. Lids of tins should be promptly replaced each time "G.4" is decanted. The "G.4." takes approx. one hour to go tacky-hard and continues to cure for eight hours: but the resin and glassfibre should be applied as soon as "G.4." goes tacky-hard or within two hours or so. The longer the delay the less good the degree of adhesion of resin to "G.4."

TIMBER TANKS

Timber should be pre-impregnated with Resin "A": spread at 1½oz/sq.foot: and this allowed to harden before applying the GRP. An alternative is to use "G.4." as above. Timber tanks should be sheathed only on the inside. Do NOT sheath outside as well: as if timber is wholly encased it cannot "breathe" and will rot.

CONCRETE TANKS

A coat of "G.4." applied as above is essential to prevent Alkali in the concrete attacking the polyester resin.

ALL TYPES OF TANK

A fillet of talc powder mixed with Resin "A" should be applied over all corners: vertical and horizontal: to avoid having to dovetail glassfibre into 90 degree internal angles where leaks could occur. This should be done after applying initial coat of "G.4." or Resin "A" to these areas. 2

THICKNESS OF LAMINATE. For tanks up to four feet in depth two laminations of 1½ozs (450 gr) CSM plus final surface tissue should suffice. Deeper tanks would require additional laminations of CSM. Always carry the sheathing over top edge of tank and 2" or so down outside. Do NOT terminate sheathing on vertical: where delamination could start to occur.

INSULATED TANKS

The tank can be made in "Sandwich" construction: as described in our general literature: Page 16. Use 2" thickness rigid expanded polyurethane foam sheet: nailed over a timber frame with small-headed nails. Apply GRP on outside. When hard knock away the timber frame and sheath inside. The sheathing must be adequately thick so that there is no risk of foam being crushed. If cells are crushed the foam will absorb water.

DEEP TANKS

Adequate ventilation must be provided not only to protect operatives: who should wear respirators: but unless the styrene can freely emanate from the resins as they harden: hardening and cure of resins will be inhibited.

TANKS TO CONTAIN CHEMICALS

The Isophthalic and Neo Pentyl Glycol Resins will resist moderately aggressive chemicals but for more aggressive chemicals HET ACID or BISPHENOL types have to be used. Customers should inform us of precise description of the chemicals: percentage dilute and average and maximum temp. of contents of tanks so that we can recommend suitable types of resins.

FILLER PASTE

When adding any filler powder to resins: always add the catalyst first: before adding the powder: otherwise there can be adverse chemical reaction.