

4. COMPARISON TABLES :

| TABLE II:- COMPARISON OF ENCLOSURE MATERIALS. | | | | |
|--|-----------------------------|-----------------------|------------|---|
| SL. NO. | DESCRIPTION | POLY CARBONATE | ABS | GLASS FIBRE REINFORCED POLYESTER |
| 1. | Outdoor use | X X X X | X | X X X X X |
| 2. | Indoor use | X X X X X | X X X X X | X X X X X |
| 3. | Salt water environments | X X X X X | X X | X X X X X |
| 4. | Light weight | X X X X X | X X X X X | X X X |
| 5. | High rigidity | X X X | X | X X X X |
| 6. | Impact resistance | X X X X X | X X X | X X X X |
| CHEMICAL RESISTANCE | | | | |
| 7. | Neutral salts | X X X X X | X X X X | X X X X X |
| 8. | Acids, low concentration | X X X X X | X X X X | X X X X X |
| 9. | Acids, high concentration | X X X | X | X X X |
| 10. | Alkalis, low concentration | X X X | X X X X X | X X X X |
| 11. | Alkalis, high concentration | X | X X X X | X X X X |
| 12. | Petroleum | X X X | X | X X X X X |
| 13. | Hydraulic oil | X X X X X | X X X X X | X X X X X |
| 14. | Alcohols | X X X X | X X X | X X X X |
| 15. | Solvents | X | X | X X X X X |
| 16. | Cooling fluids | X X X | X X X X X | X X X X X |

LEGEND

- X X X X X - Excellent
- X X X X - Very good
- X X X - Good
- X X - Fair
- X - Poor

| TABLE III:- GASKET MATERIALS - COMPARISON OF PHYSICAL PROPERTIES | | | | | |
|---|-------------------|---------------------|-------------|--------------------|-----------------|
| PROPERTY | UNIT | POLYURETHANE | EPDM | CHLOROPRENE | SILICONE |
| Temperature range | °C | -50 to +130 | -50 to +120 | - 40 to + 100 | -60 to +170 |
| Tensile strength | MPa | 0.4 | 13.0 | 8.0 | 9.4 |
| Elongation at break | % | 110 | 300 | 250 | 540 |
| Hardness | Shore 'A' | 12 | 65 | 66 | 52 |
| Density | g/cm ³ | 0.33 | 1.12 | 0.4 to 0.7 | 1.15 |
| Compression set | % | 5 | 20 | 35 | 14 |