SALBEX Industrial Grade PVC – Data Sheet

SALBEX Industrial grade sheet is a tough, rigid, PVC product that is ideal for use in many industrial applications. In addition to excellent chemical resistance, the sheet has high tensile strength, good impact strength and dimensional stability, low thermal conductivity and good electrical properties.

Fabrication is easy with SALBEX sheet, which can be sawn, drilled, routed, milled and welded. The maximum service temperature of 60°C (subject to chemical resistance considerations) can be increased to 95°C if armoured with glass reinforced polyester (GRP). SALBEX has a much lower specific gravity than other chemically resistant materials such as high duty alloys, is easily machined using standard joinery equipment, and is free from electrolytic effects when used in combination with other substrates. For these reasons it has been found to be ideal for such applications as chemical plant fabrication, laboratory drains, bench tops, sewage disposal and exhaust systems.

Physical Properties

| Property | Value | Method |
|--|--|-----------------------------------|
| Specific gravity | 1.34 | DIN 53479 |
| Vicat Softening Point | 83 +/- 1°C | DIN EN ISO 306 (5kg; air) |
| Tensile strength | 42-50 N/mm² | DIN EN ISO 527 / 1-3 |
| Elongation at Break | 50-100 % | DIN EN ISO 527 / 1-3 |
| Izod impact strength | 160 J/m ASTM D256 | |
| Coefficient of thermal linear expansion. | 8 x 10 -5 per unit of length per °C | |
| Maximum service temperature | 60°C* | |
| Volume resistivity | 10 15 ohm/cm | BS2782:1983 Method 230A |
| Surface resistivity | 10 14 ohm | BS2782:1983 Method 231A |
| Dielectric strength | 14 kV/mm | BS2782:1983 Method 220 and 221 |

^{*}Subject to chemical resistance considerations SALBEX can be used up to temperatures of 95°C if armoured with glass reinforced polyester (GRP).

Chemical Resistance Organic Compounds

SALBEX is unaffected by aliphatic hydrocarbons (most oils and greases), as well as aliphatic alcohols. It is attacked by aromatic and chlorinated hydrocarbons, ketones, ethers, esters and amines. Usually these organic compounds will cause swelling of the PVC by solvent action.

The information contained in this document is correct to the best of our knowledge but results may vary depending on the conditions under which the material is used and consequently recommendations are made without warranty or guarantee.

Inorganic Compounds

At temperatures of up to 60°C, SALBEX is resistant to attack by most inorganic liquids including moderately concentrated acids, all alkalis and aqueous salt solutions at all concentrations. Powerful oxidising agents including oxidising acids will attack it in certain conditions. A more comprehensive chemical resistance datasheet can be obtained on request from Sallu Plastics.

Cleaning

Cleaning is best carried out with dilute soap or detergent solution before being rinsed thoroughly using fresh water. Proprietary cleaners should be avoided as they may contain solvents or abrasives which could damage the material surface.

Shelf Life

Material should be stored in a cool, dry environment between 5-25°C.