

## Technical Datasheet

# Salbex Rigid PVC

Salbex sheet is a tough, rigid, PVC product that is ideal for use in a diverse range of 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.

### Physical Properties

<u>Property</u>	<u>Value</u>	<u>Method</u>
Specific gravity	1.34	DIN 53479
Vicat Softening Point	83 +/- 1°C	DIN EN ISO 306 (5kg; air)
Tensile strength	42-50 N/mm <sup>2</sup>	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.	$8 \times 10^{-5}$ 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.

#### **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.

### 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.