

# PAC SPA27/31/35 FR (FIRE RETARDANT) POLYURETHANE SPRAY FOAMS PRODUCT DATA SHEET

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Hand Pour/Injection/  
Sprayable Foams

HCFC/HFC/Pentane/  
Water Blown Foams

Integral Skin Foams

Polyurethane Rigid Foam  
Sheets

Polyurea & Polyurethane  
Spray Elastomers

Polyurethane Panel  
Adhesives

Tufflex Waterproofing

Disposable Foam  
Products

## DESCRIPTION

**PACTHANE PAC SPA27FR/31FR/35FR** are the **fully fire retarded** variants of the high performance two component polyurethane SPA series of Rigid Spray foams.

This formulation provides good strength, low thermal conductivity, fire retardance and low permeability on a wide range of substrates.

<b>PACTHANE PAC SPA27FR</b>	<b>27kg/m<sup>3</sup> free rise density</b>
<b>PACTHANE PAC SPA31FR</b>	<b>31kg/m<sup>3</sup> free rise density</b>
<b>PACTHANE PAC SPA35FR</b>	<b>35kg/m<sup>3</sup> free rise density</b>

FR grades are tested and conform to AS 1530 Part 3.

## APPLICATIONS

**PAC SPA-27FR** is recommended whenever highest yield, maximum insulation and flame retardant properties are required.

**PAC SPA-35FR** provides maximum foam strength and minimum shrinkage.

These products are ideal for insulating:

**Spa shells, cold stores, air-conditioning units, pipes, refrigeration units and cabinets, fish holds, film and stage props fabrication.**

**NOTE:** Exterior applications of spray foam should be protected against exposure by appropriate sheathing or membrane.

## PHYSICAL PROPERTIES

### LIQUID COMPONENTS

	COMPONENT A	COMPONENT B
Appearance	Brown liquid	Clear liquid
Specific Gravity	1.24	1.19
Viscosity	200 cps	800 -1000 cps
Mix Ratio – by volume	1	1

### REACTION PROFILE (20°C)

Cream Time	3 seconds
Gel Time	5 seconds

### FOAM PROPERTIES

Free rise density	27/31/35 kg/m <sup>3</sup> ± 2 kg/m <sup>3</sup>
Thermal Conductivity	0/02 W/mK approx
Compressive Strength	140/160/180 kN/m <sup>2</sup> approx
Closed Cells	90 – 95%
Water Absorption (20°C)	0.45 kg/ m <sup>2</sup>
Fire Test (AS 1530 Part 3)	
Ignitability Index	16 (0-20)
Flame Spread Index	0 (0-10)
Heat Evolved Index	0 (0-10)
Smoke Developed	5 (0-10)

## PROCESSING INFORMATION

**PACTHANE PAC SPA27/31/35 FR** Spray Foams are designed to be applied using high pressure spray-in place plural component dispensing equipment, such as the Glas-Craft dispenser fitted with a Probler Gun.

Drums of Components should be pre-heated to at least 25°C prior to dispensing, with the machine set to the following parameters:

Equipment Pressure	1000 psi minimum
<b>Component A (iso)</b>	
Hose Temperature	30°C – 40°C
Machine Temperature	40°C – 45°C
<b>Component B (Polyol)</b>	
Hose Temperature	30°C – 40°C
Machine Temperature	40°C – 45°C
Gun:	#02 round spray chamber or equivalent

Check and maintain component dispensing ratios regularly.

## APPLICATION CONDITIONS

**PACTHANE PAC SPA27/31/35 FR** is formulated for application on most surfaces under various conditions. Substrates should however, be clean and dry. Water or moisture may react with the components and affect the finished results. Surfaces should be in the temperature range of 15 – 35°C.

Excessive wind will result in significant spraying losses. Wind screens may be required for wind velocities exceeding 10 km/hr and no spraying should take place with wind velocities exceeding 20 km/hr.

## COVERAGE

The density of the obtained foam depends on the grade selected, the actual conditions present during the application process and the spraying technique. The ambient temperature and moisture as well as the temperature and nature of the sprayed surface have a significant influence.

Actual coverage and density should be checked when commencing spraying then at regular intervals to ensure that the expected results are being achieved.

Adverse surface or ambient conditions, surface profiles, off-ratio dispensing, inadequate component pre-heat and spraying technique will affect the achieved coverage.

## PRODUCT HANDLING

All persons using spray foam components should be trained in their use and be familiar with the product MSDS's.

### Component A (diphenylmethane-diisocyanate)

This is a potential respiratory sensitiser. Persons who suffer from hypersensitivity of the respiratory tract (e.g. asthmatics and chronic bronchitis sufferers) should avoid handling this product.

Avoid contact with the eyes or skin and breathing the vapour. Wear appropriate personal protective equipment when servicing equipment and breathing apparatus when spraying foam.

Exposure levels must be maintained below the safe thresholds.

### Component B (polyol blend)

This contains polyols and HCFC blowing agents.

Avoid contact with the eyes or skin. If eye contact occurs, flush thoroughly with water and consult a physician.

Wear appropriate personal protective equipment when servicing equipment.

Provide additional ventilation if used in confined spaces.

### Cleanup

Cured polyurethane foam is difficult to remove chemically. Therefore, overspray and spillage should be minimized and cleaned up as soon as possible.

PAC Poly Clean aerosol cans can be used for small areas while PAC Methyl Proxitol is available for larger areas and for flushing lines.

### Storage

Components should be stored at temperatures between 15°C and 25°C. Containers should be tightly closed

Polyols should be remixed if not used within 3 months of delivery.

Shelf life is 6 months from delivery minimum

**24 hr Emergency No: 00800 2436-2255**

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