# VITAPUR NIGERIA LTD - RC 810645

## POLYURETHANE DATA SHEET AND PANEL SPECIFICATION

## **GENERAL**

Polyurethane (PU) rigid foam offers the highest performance for the following applications:

- Thermal Insulation
- Refrigerated/Insulated Truck Bodies
- Clean & Cold Room Panels (Core)
- Air handling units
- Telecom Shelter
- Portacabin

## **CHARACTERISTICS**

- PU has excellent thermal conductivity and very high compressive strength in relation to other insulation materials.
- PU has a low level of chlorine.
- PU is dimensionally stable in the range –180°C to +140°C.
- PU is chemical resistant.
- PU has a high level of closed cells, therefore, offering high levels of buoyancy.

## **TECHNICAL DATA**

#### **DESCRIPTION:**

Rigid Polyurethane Closed Cell foam is usually supplied in the form of sandwich panels.

#### **DENSITY**:

40 kg/m $^3$  – minimum density. Core sample may exhibit variations of up to 10%. Test to SABS 1383 of 1983 – Part 5.6

## **COMPRESSIVE STRENGTH:**

Parallel to rise: 300 kPa
Perpendicular to rise: 170 kPa

Variation of 10% may be found. SABS 1383 Part 5.7

# **CLOSED CELL CONTENT:**

Minimum value: 90%. SABS 1383 of 1983 - Part 5.8

#### THERMAL CONDUCTIVITY:

At 10°C: 0.024 W/mK.

## **DIMENSIONAL STABILITY:**

At –15°C Dimension Change: <1%

At 100°C Dimension Change : <2%

## **FIRE PERFORMANCE:**

PU contains fire retardant to discourage flame spread.

## **DIMENSIONAL TOLERANCE:**

Conforms to SABS 1383

Length and Width +/-2.5mm

Thickness +/-1.5mm

# **SPECIFICATION SHEET POLYURETHANE INJECTED PANELS**

## Panel specifications

Standard widths: - 950mm (ribbed), 975mm (plain surface), 1200mm

Due to site conditions, non-standard widths from 100mm to a maximum of 1200mm can be manufactured.

Standard lengths: - 2400mm, 3000mm, 3600mm, 4800mm, 6000mm, 12000mm, 14500mm.

As per client requirements, non-standard lengths from 2400mm to 14500mm can be manufactured.

Standard Panel Thicknesses: 50mm, 60mm, 75mm, 80mm, 100mm, 120mm, 125mm and 150mm.

## Materials used in the manufacture of panels

#### Chromadek

Colour – Frost white (RAL 9002) 30% gloss with 50 micron strippable plastic applied for protection against scratching in the manufacture, transport and erection process.

Thickness – o.5mm

Width - 1200mm, 950mm

Galvanize coating – Z160

Base material (Chrome free primer) – 5micron thick

Paint thickness (Top coat) - 20 micron thick

Hardness – I S Q 230 Commercial quality

## **Available Interlock**

- Camlock
- Tongue and Groove

## **Polyurethane**

The Polyurethane foam used is combustion modified according to ISO 3582

Normal density of foam - 4okg/m<sup>3</sup>

Lambda Value (Thermal Conductivity Value) – 0.024W/mk (at room temperature)

R – Value – 1.14m<sup>2</sup>.K/w per inch

## **DISAVOWAL:**

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