

## Plasthane – HP 300

### PRODUCT DESCRIPTION

Plasthane – HP 300 is a two part flame retardant low density polyurethane foam system with a nominal free rise density of 32-34 KM3. HP 300 is formulated as a general purpose pour or injection foam system. This system can be hand mixed using mechanical mixer at 2000-2400 RPM or can be dispensed using plural component 1:1 ratio machine such as Graco Reactor or equivalent. This product does not contain Dichlorofluoroethane as a blowing agent. Plasthane HP 300 has Zero ODP, Zero GWP and Zero VOP. Plasthane HP 300 produces a stable foam even when used in free rise applications.

### RECOMEMNDED PRODUCT APPLICATION

- HP 300 Can be used in Wave Skies, Canoes, Marine buoyancy applications, in cavity filling / compartment, void filling for boats, with moulded fiberglass/aluminium/steel hull material.
- In building panels, moulding/void filling application where low wright and increased stiffness/stability are required.
- Thermal insulations in cold and hot applications, for contact surface temperature from -30C to +85C
- For pour in place or injection used by either hand mix or machine processing.
- For further information please see material safety data sheet or contact technical staff.

### LIQUID PROPERTIES @25C

	Polyol Component – Part A	ISO Component – Part B
Appearance	Clear Amber Liquid	Dark Brown Liquid
Brookfield Viscosity 3/30RPM	700-750 cps	180-250 cps
Specific Gravity (gm/ml)	1.05	1.24

### REACTIVITY PROFILE @20C

100gms of Polyol and 115 gms ISO mixed with electric stirrer @2000-2400 rpm in a plastic cup.

Mix Time	20	Seconds
Cream Time	35-40	Seconds
Gel Time	170-190	Seconds
Tack Free Time	220-235	Seconds
Free Rise Core Density	32-34	kgM3

## TYPICAL PHYSICAL PROPERTIES OF PLASTHANE HP 300

Property	Test Method	Results for Plasthane HP 300
Foam Density		40kg/m <sup>3</sup>
Compressive strength Parallel to rise @10% deformation	AS – 2498.3	245 Kpa
Compressive strength Perpendicular to rise at 10% deformation	AS – 2498.3	142 kpa
Closed cell content %	AS-2498.7	>94
Thermal Conductivity Initial (W/mk)	-	0.024
Water Absorption @ 23C	AS-2498.8	0.04 Kg/M <sup>2</sup>
Dimensional Stability @85C for 14 days	-	Length, width and thickness - no change
Dimensional Stability @-20C for 14 days	-	Length, width and thickness - no change

### USER GUIDE / Processing Conditions

- Plasthane HP 300 is designed to produce a fire retardant foam at nominal density of 32-34 Kg/m<sup>3</sup> using ratio at 100 parts Polyol and 115 parts of MDI by weight or 1:1 by volume.
- Variation from recommended temperatures of the component will affect the foam quality and stability
- Warm mould / contact surface temperature 30-34C will provide best results in foam quality and yield.
- Restriction to the flow / expansion of the foam will result in increase in-situ density.

### FIRE HAZARD - USE OF PRODUCT

Plasthane HP 300 contains chemical fire retardant additive the foam will burn while in contact with a flame or under very high temperature fire conditions.

Follow the building code of Australia requirements / use conditions for the use of rigid cellular polyurethane products in commercial and industrial building applications.

Use of polyurethane or polyisocyanurate foam in interior applications present an unreasonable fire hazard unless the foam is protected with fire resistant thermal barrier.

### HEALTH AND SAFETY ISSUES

Before using Plasthane – HP 300 please read the Materials Safety Data Sheet for both components. Please always wear proper protective clothing, goggles, gloves and breathing equipment according to Materials Safety Data Sheet

### EXCLUSION OF WARRANTIES

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