PROTAVIC® PTS 40314

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DEFINITION

PROTAVIC® PTS 40314 is a one component silicone rubber developed for glob top application where flexibility, reparability, thermal conductivity and high temperature resistance are required.

PRODUCT DESCRIPTION

Appearance	viscous liquid	
Odour	faint	
Colour	black	
Guaranteed specifications	**Standard**	**Method**
Cone and plate viscosity	40000 ± 15000 mPa.s	NFT 51211
Other informations		
Density	1.9 approx.	
Thixotropic index	About 3	
Curing schedules	30 minutes at 125°C 1 hour at 100°C 2 hours at 85°C	
Flammability	Flame retardant	
Stability	6 months at temperature < -20°C	
Pot life* at 20 ± 1°C	24 hours	

* Pot life defined as time corresponding to a 100% increasing viscosity

APPLICATION PROPERTIES

The thixotropic behaviour of **PROTAVIC® PTS 40314** and the nature of its components make the product well adapted to micro-dispensing.
The high ionic purity of **PROTAVIC® PTS 40314** also avoids problems of corrosion, which would otherwise reduce the working life of the system. It also contributes to the reliability of components during utilisation.

CONDITIONS OF USE

Degrease very carefully substrates or components before bonding with non chlorinated solvents (which may encourage corrosion) and finish, if possible by degreasing in a solvent vapour at the end, to achieve optimal adhesion.
Apply the resin with a micro-dispenser and needles of 0.5 to 1.5 mm internal diameter

Typical curing schedule is 30 minutes at 125°C. Such conditions allow the compound to present optimised thermal and physico-chemical properties.

TYPICAL PROPERTIES OF POLYMERIZED SYSTEM

The properties given below and summarised in the following tables were obtained after polymerisation for 30 minutes at 125°C.

These values given are typical and do not correspond to a guarantee. The user must, in all cases, by his own studies, determine the optimal polymerisation conditions for his own particular application of **PROTAVIC® PTS 40314**.

1) PHYSICO-CHEMICAL PROPERTIES

PROPERTIES	METHODS	UNITS	VALUES
Density	NFT 51063	None	1.9 approx
Shore A hardness	NFT 51109	none	About 55
Glass transition temperature	TMA 1	°C	≈ -65°C
Coefficient of thermal expansion at room temperature	TMA 1	ppm/°C	About 200

2) THERMAL PROPERTIES

PROPERTIES	METHODS	UNITS	VALUES
Thermal conductivity	CTH2	W/m.K Btu/ft².in. F.h	1.3 9.1
Decomposition temperature	TGA 1	°C	About 500
Weight loss(1 week at 150°C)	TGA 1	%	0.25

STORAGE CONDITIONS

Store **PROTAVIC® PTS 40314** in deep freezer at -20°C or below. In theses conditions, the product may be stored in its unopened package for 6 months

PRECAUTIONS OF USE

Refer to attached material safety data sheet.

PACKAGING

PROTAVIC® PTS 40314 is supplied in 50 g syringes. Other packaging is available upon request