TECHSIL® RTV2430

TECHSIL® RTV2430 is a two component room temperature condensation curing silicone compound.
The cured product is an exceptionally flexible rubber with very high mechanical properties and good shelf life stability. It is suitable for mould making of intricate patterns with extremely good pick up of fine details. Softer grades are better suited for use where there are deep undercuts.

Key Features

- Very High Tear Strength
- Dimensional Stability
- Chemical Resistant to PU and PE
- High Detail Pick Up

Use and Cure Information

The curing process starts as soon as the catalyst is added. Under normal conditions of temperature and humidity, typical curing characteristics are described below. If the product is to be used in contact with aggressive chemicals, such as high styrene polyester resins or epoxies, it is recommended that the rubber be allowed to cure for 48 hours before use.

How to Use

Charge 95-100 parts by weight of Base Rubber and 5 parts by weight of Catalyst into a suitable plastic or metal container. The volume of the mixing vessel should be sufficient to allow for rapid expansion which takes place during the initial degassing of the catalysed rubber.
Mix thoroughly avoiding excessive air entrapment but using the colour contrast to achieve homogeneity. Stop the mixer and scrape the vessel walls a few times. To prevent imperfections due to bubbles in the cured rubber, it is advisable to de-aerate the liquid rubber by using intermittent evacuation for a few minutes. Normally after releasing the vacuum 2 or 3 times, the mass collapses naturally after which degassing should continue for only a few minutes.

Vertical Application

TECHSIL® RTV2430 can be used to make mouldings on vertical surfaces by employing a Thixotroping Agent. A typical formulation for good thixotropy and approximately the same working life of the normal rubber is shown below:-

- TECHSIL® RTV2430 95-100 parts by weight
- Catalyst 5 parts by weight
- Thixotroping Agent 2-3 parts by weight

Mix the components in the above order. When using the fast cure catalyst, if degassing is required it must be done quickly after catalysation and before the addition of the Thixotroping Agent. Pot life and rate of cure is slightly shorter in the presence of Thixotroping Agent.

Contact Details

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Physical Properties

Property	Test Method	Value
Uncured Product		
Colour:		Beige
Appearance:		Viscous Liquid
Viscosity:	Brookfield	34000 mPa.s
Catalysed viscosity:	Brookfield	26000 mPa.s
Pot Life:		109 Minutes*
De-mould Time:		7 Hours*

* measured at 23+/-2°C and 65% relative humidity using standard catalyst.

Cured Elastomer (after 7 days cure at 23+/-2°C and 65% relative humidity)		
Tensile Strength:	BS903 Part A2	4.03 MPa
Elongation at Break:	BS903 Part A2	401%
Youngs Modules:		2.00 MPa
Modulous at 100% Strain:	BS903 Part A2	1.56 MPa
Tear Strength:	BS903 Part A3	30.31 kN/m
Hardness:	ASTM D 2240-95	27 Shore A
Specific Gravity:	BS903 Part A1	1.31
Linear Shrinkage:		0.46%
Coefficient of Thermal Expansion:		
Volumetric		709 ppm / °C
Linear		236 ppm / °C
Min. Service Temperature:		-50°C
Max. Service Temperature:	AFS 1540B	200°C

All values are typical and should not be accepted as a specification.

Health and Safety

Material Safety Data Sheets available on request.

Packages

TECHSIL® RTV2430 is supplied in 1kg, 5kg and 20kg bulk containers.
Catalyst is supplied in 50g, 250g and 1kg containers.
Thixotroping Agent is supplied in 100g, 500g and 1kg

Storage and Shelf Life

Expected to be **12** months in original, unopened containers below 40°C.

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