

RTV 8330

2 Component addition cure Pad Printing material

Product Description

RTV 8330 is a liquid 2-component RTV silicone rubber with a convenient mix ratio of 10:1. The mixed material will vulcanize at Room Temperature by an addition reaction. Increasing the temperature will accelerate the cure rate. The product is especially developed for pad printing applications that require easy mixing, good pourability and flow, room temperature cure, minimal shrinkage and easy dilution with Silicone Fluid S50RTV to reduce hardness to the value required for the application maintaining acceptable cure times.

Key Performance Properties

- Convenient 10:1 mixing
- Good flow, pourable
- Fast cure at room temperature
- Short demoulding times also after dilution with Silicon Fluid S50RTV
- Easy to colour

Applications

RTV 8330 has been especially developed for pad printing applications. Common practice in the pad printing industry is to dilute the base product by adding silicon oil (e.g. Silicone Fluid S50RTV) to match the hardness required for the application. To maintain acceptable cycle times in the pad production the RTV 8330 has been developed to give high cure speed and a fast demoulding time even when diluted with 100 - 125 parts of Silicone Fluid S50RTV.

Typical Product Data

Individual components	Unit	RTV 8330 A	RTV 8330 B
Appearance		Translucent	Translucent
Viscosity 20 deg. C (Brookfield)	mPa.s	100.000	10.000
Mixed components	Unit	RTV 8330 A:B 10:1	
Appearance		Translucent	
Potlife at RT	min	35	
Viscosity 20 deg. C (Brookfield)	mPa.s	80.000	

Typical cured properties

Cure conditions: 10:1 mix, 2 mm thick sheet, cured for 24 hrs at RT.

Property	Test method	Unit	Typical Values
Hardness	DIN53505	Shore A	30
Tensile Strength	DIN53504	MPa	5
Elongation	DIN53504	%	450
Tear strength	ASTM D-624 B	N/mm	20
Linear shrinkage		%	<0.1
Density		g/cm ³	1.06

Specifications Typical product data values should not be used as specification. Assistance and specification are available by contacting Momentive performance materials Technical Service RTV1 and RTV2.

Instructions for Use **Mixing:**

The A and B component (in a ratio of resp 10:1 by weight) combined with a selected amount of silicone fluid and optionally a pigment paste (like e.g. 1 or 2 % by weight of Silopren LSR colour masterbatch) should be stirred for several minutes in a container 4 - 5 times larger than the volume of the mix until the material is well mixed. The air entrapped in the mixing step needs to be removed. This can be done by exposing the material to a vacuum of 10-20 mbar. The material will expand, crest and reduce to about the original level. Degassing is usually complete about two minutes after frothing ceases.

The amount of fluid to be used to achieve a certain Shore A or Shore 00 hardness can be estimated by using the graphs below. These graphs can only be used as an indication and should be verified with each new batch of pad printing base material or silicon fluid to assure that the normal batch to batch variation of these materials is captured.

Compatibility Certain materials such as butyl and chlorinated rubber, sulfur containing materials, amines and certain metal soap cured RTV silicon rubber compounds can cause cure inhibition. Cure inhibition is characterized by a gummy appearance of the silicone at the interface between the silicone and the substrate/mould. It is recommended that a sample patch test is performed with the RTV 8330 to determine if a barrier coating or other inhibition preventing measure is required.

Curing RTV 8330 has been developed to give full cure within 24 hrs even when diluted with 125 parts of Silopren S50RTV fluid. Addition of fluid will have some effect on pot life and demoulding time. As an example: Adding 100 parts of S50RTV will give an increase in pot life to typically ca. 60 minutes and a demoulding time of typically appr. 10 hrs.

Handling and Safety Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information for solvents and other chemicals used with the Momentive performance materials products should be obtained from your supplier. When solvents are used, proper safety precautions must be observed.

Storage and Warranty Period The warranted shelf life will be indicated by the 'use before date' on the associated documents with a minimum of 4 months when stored in the original unopened containers below 25° C.

Availability RTV 8330 will be available in 22 kg pail kits and in 220 kg drum kits.



PRINCIPAL LOCATIONS – Regional Information

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CUSTOMER SERVICE CENTERS

North America	Charleston, WV 25314, USA E cs-na.silicones@momentive.com		
	• Specialty Fluids	T 800.523.5862	F 304.746.1654
	• UA, Silanes, Resins, and Specialties	T 800.334.4674	F 304.746.1623
	• RTV Products-Elastomers	T 800.332.3390	F 304.746.1623
	• Sealants and Adhesives & Construction	T 877.943.7325	F 304.746.1654
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