

TSE3455ST

Addition Cure Mouldmaking Compound

Product Description

TSE3455ST is a two-component, addition cure liquid silicone rubber designed for mould making. TSE 3455ST cures at room temperature to a translucent high strength elastic rubber with the addition of curing agent.

Key Performance Properties

- Excellent moulding durability to epoxy resin and polyurethane resins
- Excellent release ability
- Low viscosity
- Excellent tear and tensile strength
- Low shrinkage (room temperature cure)

Applications

- Prototype mould making for electric & electronics industry such as TVs, home appliances, mobile phones, copy machines etc.
- Prototype mould making for automotive industry such as console boxes, radiator grilles, lamp housings etc.

Typical Product Data

BASE PROPERTIES		TSE3455ST (A)
Appearance		translucent
Viscosity	mPa·s	45 000
CATALYST PROPERTIES		TSE3455ST (B)
Appearance		translucent
Viscosity	mPa·s	1 500
Mix Ratio	Wt %	10:1
Work life (23°C)	Minutes	90
Demould time	h	24
CURED PROPERTIES		72 H / 25°C
Appearance		translucent
Density	g/cm ³	1.1
Hardness	Shore A	41
Tensile strength	MPa	6.4
Elongation	%	360
Tear strength	N/mm	20
Linear shrinkage	%	0.1

Specifications	Typical product data values should not be used as specification. Assistance and specifications are available by contacting Momentive performance materials Technical Service RTV1 and RTV2.
Instruction for Use	<p>Mixing Select a mixing container 4-5 times larger than the volume of RTV silicone rubber compound to be used. Weigh out the RTV silicone rubber base compound (A) and add the appropriate amount of curing agent (B). With clean tools, thoroughly mix them, scraping the sides and the bottom of the container carefully to produce a homogeneous mixture.</p> <p>Deaeration Air entrapped during mixing should be removed to eliminate voids in the cured rubber. Expose the mixed material to a vacuum of 10-20 mbar. The material will expand, crest, and recede to about the original level as the bubbles break. Degassing is usually complete about two minutes after frothing ceases. Automatic equipment designed to meter, mixes deaerates and dispense two/component RTV silicone rubber compounds will add convenience to continuous or large volume operations.</p> <p>Curing TSE 3455ST silicone rubber compound will cure sufficiently in 24 hours at 25°C. To achieve faster cure speeds, elevated temperatures may be used.</p> <p>Caution TSE 3455ST will cure in contact with most clean and dry surfaces. However certain materials, such as butyl and chlorinated rubber, sulphur-containing materials, amines and certain metal soap-cured RTV silicone rubber compounds can cause cure inhibition.</p>
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 & Warranty Period	The 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	TSE3455ST (A) is available in 20 kg pails and 180 kg drums. TSE3455ST (B) is available in 1 kg cans and 18 kg pails.



PRINCIPAL LOCATIONS – Regional Information

North America	World Headquarters 187 Danbury Road Wilton, CT 06897, USA	T 800.295.2392	F 607.754.7517
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Pacific	Akasaka Park Building - 5-2-20 Akasaka Minato-ku, Tokyo 107-6112 Japan	T +81.3.5544.3100	F +81.3.5544.3101

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
Latin America	E cs-la.silicones@momentive.com		
	• Argentina & Chile	T +54.11.4862.9544	F +54.11.4862.9544
	• Brazil	T +55.11.4534.9650	F +55.11.4534.9660
	• Mexico & Central America	T +52.55.5899.5135	F +52.55.5899.5138
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