

BLUESIL ESA 6009T A/B

Description

BLUESIL™ ESA 6009T A&B is a two-component silicone gel which cures at room temperature by polyaddition reaction. The polymerization can be accelerated by heat. The silicone material is delivered as two low viscosity liquid components, which once mixed and cured, transform into an elastic gel.

Examples of applications

- Protection of electronic modules
- Encapsulation of electronic components
- Dampening Systems

Key benefits

- Rapid cure at ambient conditions
- Low viscosity
- Easy processing 1:1 mix ratio (by volume or by weight)
- High inherent tack
- Produces opaque red cured product
- No free oil

Typical properties

Properties	BLUESIL ESA 6009T	
	A	В
Mix Ratio A:B	1	1
Physical State	Liquid	Liquid
Appearance	Blue	Red
Color	Blue	Red
Viscosity (cP)	2,100	2,000
Specific gravity	0.98	0.98

Cured for 24 hours @ ambient temperature	BLUESIL ESA 6009T A / B
Penetration, ½"dia w/ ¼" radius end, SS, 3" tall (g)	130
Pot Life (minutes)	5-8
Curing Time (minutes)	<30
Probe Tack (grams)	18
Dielectric Properties	
Dielectric Strength (V/mil)	365
Dielectric Constant @ 1MHz, approx.	4.62
Dielectric Constant @ 100kHz, approx.	4.71
Volume Resistivity (Ω·cm)	3.91 x 10 ¹⁴

Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.

Instruction of use

1. Mixing the two components:

The components A and B are mixed by weight or volume at a 1:1 ratio. The mixing can be carried out either by hand or by using a low-speed electric or pneumatic mixer to minimize the introduction of air and to avoid any temperature increase. It is also possible to use meter mix



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and dispense equipment designed for two component silicone materials. Further information is available upon request.

2. De-Airing:

The mixture should be de-aired to eliminate any entrapped air in the cured product. When deairing, the silicone mixture can expand to 3 - 4 times its initial volume, ensure that a properly sized container is used such that the material does not overflow the container. The mixed material will crest and collapse upon itself, after collapse, deair for additional 30-90 seconds. The silicone is ready for pouring, either by gravity or under low pressure. If a meter mix and dispense machine is used, the two components are delivered de-aired, thus no additional deairing is necessary.

3. Curing:

The system cures at room temperature. The curing will be slowed down at lower temperatures or can be accelerated by the addition of heat.

Note: contact with certain materials can inhibit the crosslinking. See list below:

- Natural rubbers vulcanized with Sulphur
- Sulphur containing compounds including latex gloves and wooden tongue depressors
- RTV-2 silicone elastomers catalyzed with metal salts, e.g. tin-compounds
- PVC stabilized with tin salts and additives
- Epoxy resins catalyzed with amines

The above list should not be considered all inclusive, in case of doubt, it is recommended to test the substrate by applying a small quantity of the mixed silicone on a restricted area or consult Elkem Silicones Representative.

Regulation	Please consult your local ELKEM SILICONES sales office.	
Limitations	Please consult your local ELKEM SILICONES sales office.	
Packaging	 BLUESIL ESA 6009T A BLU U1 is available in Tote bin of 1000 KG (2205 LB) Drum of 200 KG (441 LB) Pail of 20 KG (44.1 LB) BLUESIL ESA 6009T B RED U1 is available in Tote bin of 1000 KG (2205 LB) Drum of 200 KG (441 LB) Pail of 20 KG (44.1 LB) 	
Storage and shelf life	When stored in its original packaging: BLUESIL ESA 6009T A BLU U1 may be stored for up to 12 months from its date of manufacturing. BLUESIL ESA 6009T B RED U1 may be stored for up to 12 months from its date of manufacturing. Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.	
Safety	Please consult the Safety Data Sheet of: BLUESIL ESA 6009T A BLU U1 and BLUESIL ESA 6009T B RED U1	

Visit our website www.elkem.com/silicones/

Warning to the users

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