

BLUESIL ESA 6025 A&B

Description	Silicone gel on board electronic. BLUESIL ESA 6025 A&B is a pourable, two component silicone rubber that cures at room temperature by a polyaddition reaction, to a very soft and translucent silicone gel. BLUESIL ESA 6025 A&B is particularly recommended for applications where a self-bleeding effect is prohibited.
Examples of applications	<ul style="list-style-type: none"> - Encapsulation of electronic components for the automotive and power electronics industries. - Damping systems. - Encapsulation of solar cells.
Key benefits	<ul style="list-style-type: none"> - Easy processing, due to the good fluidity of parts A and B, mixing ratio (1:1). - Good pourability. - Translucent. - Quick setting, accelerated by heating. - Pronounced inherent tack. - Outstanding dielectric properties. - Good heat stability in confined space (even above 100°C). - Outstanding protection of encapsulated equipment against mechanical stress due to temperature variations and vibrations.

Typical properties	<i>Properties</i>	ESA 6025 A	ESA 6025 B
Aspect		Liquid	
Color		Light blue	Colorless
Specific gravity (ISO 2781, approx.)		0.97	
Viscosity (at 23°C, mPa.s, approx.)		1400	1100
Viscosity of the mixing (at 23°C, mPa.s, approx.)		1 250	
Mixing Ratio A : B (parts by weight)		1:1	
Gel time (at 23°C, minutes, approx.)		70	
Curing time recommended at RT (h, approx.)		4	

Cured compound

<i>Properties</i>	ESA 6025 A&B
Color	Light blue transparent
Penetration (ISO 2137, 150 g hollow cone, 1/10 mm, approx.)	260

Dielectric properties

<i>Properties</i>	ESA 6025 A&B
Dielectric Strength, kV/mm (IEC 60243), approx.	23
Dielectric constant at 1 kHz (IEC 60250) approx.	2.8
Dielectric dissipation factor at 1 kHz (IEC 60250), approx.	0,0005
Volume resistivity, Ω.cm (IEC 60093), approx.	10 ¹⁶

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

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Instruction of use

Mixing guidelines:

1. Mix Part A and Part B components according to recommended weight ratios. The two components are thoroughly mixed using an electrical or pneumatic mixer, on a low speed setting so as to limit the inclusion of air in the mixture. A dispensing machine can also be used.
2. After mixing A and B parts, it is preferable to degas the product to eliminate the air bubbles that would be visible in the finished part and which would reduce the mechanical and dielectric properties. Degassing is generally carried out with a vacuum of 30 to 50 mbar releasing the vacuum several times during the operation. A recipient with a high diameter/height ratio is better suited to quick degassing; however, the height must be sufficient to contain the swelling of the elastomer under vacuum conditions.
3. **BLUESIL ESA 6025 A&B** is poured slowly and regularly. In the case of a high thickness coating operation, the casting must be made at the lowest point in the volume to be filled; this avoids forming and including air bubbles in the volume. It should not be filled totally to allow expansion of the **BLUESIL ESA 6025 A&B** at service temperatures.
 Certain materials that **BLUESIL ESA 6025 A&B** may be in contact with when curing could inhibit the reaction. Especially troublesome materials are: Sulphur-containing cured natural and synthetic rubber compounds (neoprene, latex, SBR), tin catalyzed silicone rubbers, amine catalyzed epoxies, PVC stabilized with tin salts and some polyurethane elastomers.

Regulation Please consult your local ELKEM SILICONES sales office.

Limitations Please consult your local ELKEM SILICONES sales office.

- Packaging**
- BLUESIL ESA 6025 A is available in
 - Tote bin of 1000 KG (2205 LB)
 - Drum of 200 KG (441 LB)
 - Pail of 25 KG (55.13 LB)
 - BLUESIL ESA 6025 B is available in
 - Tote bin of 1000 KG (2205 LB)
 - Drum of 200 KG (441 LB)
 - Pail of 25 KG (55.13 LB)

Storage and shelf life When stored in its original packaging:
 BLUESIL ESA 6025 A may be stored at temperatures between -10°C / 14°F and 30°C / 86°F for up to 12 months from its date of manufacturing.
 BLUESIL ESA 6025 B may be stored at temperatures between -10°C / 14°F and 30°C / 86°F 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 6025 A and BLUESIL ESA 6025 B

Visit our website www.elkem.com/silicones/

Warning to the users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products. ELKEM SILICONES guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for given use. Determination of the suitability of product for the uses and applications contemplated by users and others shall be the sole responsibility of users. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations. Users are requested to check that they are in possession of the latest version of this document and ELKEM SILICONES is at their disposal to supply any additional information.