



Key Features

- Highly conformable 40 Shore-A
- High thermal expansion (CTE)
- High tear-strength
- Variable cure from 100°C
- 6 month out-life

Description

INTENSIL™ 40 is a soft, pliable, uncured 40 Shore-A silicone compound developed for use as a silicone intensifier in prepreg production. Typically, the compound is used to create close-fitting silicone inserts which ensure maximum pressure is applied to the laminate in hard-to-bag corners and details, reducing the risk of bag bridging and speeding up the laminating process.

Silicone intensifier compound can also be used to reduce the risk of burst bags by using it to create caps for sharp features like bolts or clamping bushes, or plugs for holes or deep recesses.

The 40 Shore-A hardness provides the ideal balance between conformability and firmness, making it easy to accurately shape and smooth when forming the intensifier piece, as well as easily remove and refit during repeated use.

INTENSIL 40 is supplied in high-visibility yellow.

How to Use

How to Mould

When used for the first time, intensifiers are typically co-cured under vacuum bag pressure in an oven or autoclave, alongside the uncured prepreg laminate.

INTENSIL 40 should be separated from the uncured laminate (or the mould) using an unperforated release film, such as R210. In its uncured state it is soft and pliable and is easily applied and shaped by hand, or using shaping tools, to fill cavities and corners, or domed over details such as bolts or clamping bushes.

It is recommended to feather the edges of the intensifier to avoid print-through onto the laminate, or the potential for bridging of the bag onto the intensifier.

Before bagging, unperforated release film should also be applied over the uncured compound, which can also help to make shaping it easier.

Curing

INTENSIL 40 is supplied as an uncured silicone compound and requires heat to cure. Typically, the compound is co-cured alongside the prepreg on first use, following the normal cure-cycle for the prepreg. Alternatively cure for the period of time stated for one of the temperatures in the table below.

Temperature	100°C	110°C	120°C	140°C
Time	4hrs	2hrs	1hr	30min

NOTE: Should INTENSIL 40 be used for purposes other than as a silicone intensifier, such as a silicone mould or device intended for skin contact, a post-cure at 200°C for 4 hours is recommended to condition the silicone and ensure that no residual traces of curing agent remain within the silicone.

Continued Use

Once cured, intensifiers made with INTENSIL 40 are reusable indefinitely. The intensifier should always be separated from the prepreg laminate using release film.

Specification

Cured Properties

Property	Unit	Test Method	Value
Hardness	Shore A	DIN 53505	40
Density	g/cm ³	ISO 1183-1 A	1.12
Tensile Strength	N/mm ²	DIN 53504 S 1	10
Elongation at Break	%	DIN 53504 S 1	560
Tear Strength	N/mm	ASTM D 624 B	21
Max Service Temperature	°C		210

Further Information

Safety

Wear gloves when handling the uncured silicone. Always read and follow the accompanying safety and technical datasheets before use.

Storage

INTENSIL 40 has a shelf-life of 6 months at room temperature (20°C) and 2 years when stored frozen. Avoid storage conditions above 20°C as this will shorten the shelf-life of the compound.

When storing frozen, ensure the compound is stored in sealed, airtight packaging to protect from moisture. Always allow the compound to come to room temperature before use.

Disclaimer

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum. Our technical advice, whether verbal or in writing, is given in good faith but Easy Composites Ltd gives no warranty; express or implied, and all products are sold upon condition that purchasers will make their own tests to determine the quality and suitability of the product for their particular application and circumstances.

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Version 1.0
Revised 18/12/2024

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