SILICONES and more

Silicone Addition Colorless 50

Siliconen Addition Colorless 50 are ideal to make stable flexible moulds.

Description

The Silicone Addition Colorless 50 is a 2-component Platinum addition curing silicone which cures at room temperature.

The elasticity and strength of these silicones make the silicones widely applicable and especially suitable for pouring in high-density material, like molds from candles and concrete.

Technical data

Mixing ratio (weight)	[A: B]	100: 100
Pot Life @ 20°C	[Minuten]	30
Ontmaltijd @ 20°C	[Hours]	3-6
Viscosity @ 20°C	[mPa s]	13.000
Color		Transparent slightly yellow
Hardness	[Shore A]	50
Tensile strength	[N/mm ²]	8 +/- 3
Tear strength	[N/mm]	14 +/- 4
Elongation at break	[%]	>210
Density @ 20°C	[g/cm ³]	1.03

Note: Pot life / de-mould time is highly dependent on temperature! At a higher temperature, the processing time and de-mould time are shorter..

Processing

The Silicone A and B component can easily be mixed by hand or by machine. Mix the A and B component carefully and in the indicated ratio (100 parts A and 100 parts B by weight). Process the mixture within the pot life and demould only after it is cured complete. Alternatively, you can speed up the curing process by placing the whole mould in an oven. Please note that air bubbles will then have less time to escape the casting.

This shore hardness of this silicone can be adjusted by adding the Silicone Addition Colorless 50.

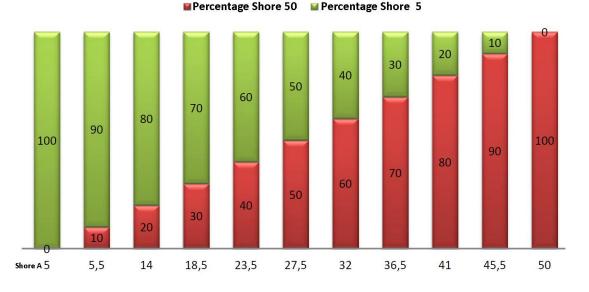
If you combine a mixture of the Shore 5 with a mixture of the Shore 50 you get a shore hardness between 5 and 50. For example: For 100 grams of Shore 18,5 you need 35 grams of Shore 5 A component 35 grams of Shore 5 B component together with 15 grams of Shore 50 A component and 15 grams of Shore 50 B component.

characteristics

- Low shrinkage of <0.1%.
- Very liquid so selfdeaerating
- Transparent
- Shore A 50 stable but flexible
- Suitable for stable but flexible moulds

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Shore value of mixture of Silicone Addition Colorless 5 with 50



Extra information

Trapping of air bubbles can be prevented best by placing the silicone under vacuum immediately after mixing. To prevent air bubbles, stir the A and B component well but slowly without stirring in air. We advise to use a figur of 8 motion. If you want to reduce the Shore (hardness), you can add silicone oil from the shop. Please note that oil does not bind to the silicone network and may over time bleed from the silicone.

If you do not want to pour the silicone spatula but you can add Silicone Thixo A (note: not Silicone Thixo C !!). You can also add fumed silica. You can silicone intense colors with silicon dye.

Please note: This is an addition curing silicone. This type of silicones may experience cure inhibition when coming into contact with sulfer, nitrogen, amino groups and metl salts. If you are not certain that the products you use (including gloves, spatulas and cups) contain these ingredients, please do a little test first! These components are often found in many latex gloves, some platicines, glues, laquers, condensation curing silicones, silicone caulk, natural rubbers and 3D printing materials (mainly stereolithography). If you still want to use such materials you might have to brush on a protective layer of poly vinyl alcohol.

Durability

Provided that the silicone in sealed packaging, stored cool and frost-free, the shelf life is at least one year.

Safety

If you use silicone frequently we advise the use of gloves and to work in a properly ventilated area. For safety information see the safety data sheet.