Novasil® S 153

Technical Datasheet

Characteristics:	 2-component silicone potting compound Based on a neutral, condensation curing system Cures at room temperature Releases alcohol as splitting product during curing. Very good resistance during Damp Heat Test (1000h +85 Excellent flowability 	5 °C / 85 % RH)	
Fields of application:			
Renewable energies:	- Potting of junction boxes in the PV-industry		
Lighting and electronics industry:	 Potting of electronical structural units Potting / coating of electrical circuit boards Waterproof sealing of measuring units 		
Standards and tests:	- According to UL FLAME CLASSIFICATION 94 HB		
Important information:	Before applying this product the user has to ensure that the materials in the area of contact (solid, liquid and gaseous) are compatible with it and also amongst each other and do not damage or alter (e. g. discolour) each other. As for the materials that will be used at a later stage in the surrounding area of the product the user has to clarify beforehand that the substances of content or evaporations do not lead to an impairment or alteration (e. g. discolouration) of the product. In case of doubt the user should consult the respective manufacturer of the material. During curing small amounts of alcohol are released. Ensure good ventilation during application and curing.		
Technical properties:	Single components: Component A		
	Colour	black	
	Viscosity at 23 °C [mPas]	< 4000	
	Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,05	
	Shelf life at 23 °C/50 % RH [months]	6	
	OTTOCURE S-CA 2250		
	Colour	transparent	
	Viscosity at 23 °C [mPas]	< 200	
	Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 0,98	
	Mixing ratio according to weight (base A : curing agent B)	10:1	
	Mixing ratio according to volume (base A : curing agent B)	11:1	
	Shelf life at 20 °C/50 % RH [months]	6	
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	Unvulcanised compound: with OTTOCURE S-CA 2250		
	Colour	black	
	Viscosity at 23 °C [mPas]	< 4000	
	Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,05	
	Shrinkage of volume according to ISO 10563 [%]	< 5	
	Processing temperature from/to [°C]	+ 10 / + 25 (1)	
	Pot life at 23 °C/50 % RH [minutes]	~ 10 - 20	
	1) temporarily up to + 30 °C		
	Vulcanisate:		
	Density at 23 °C according to ISO 1183-1 [g/cm ³]	~ 1,05	
	Shore-A-hardness according to ISO 868	~ 30 - 35	
	Temperature resistance from/to [°C]	- 40 / + 150	
	Tensile strength according to ISO 37, S3A [N/mm ²]	~ 0,9	
	Tensile expansion according to ISO 37, S3A [%]	~ 120	
	Thermal conductivity λ [W/mK]	~ 0,35	
	Dielectric strength ED according to DIN EN 60243 [kV/mm]	> 15	
	These data are not suitable for the issue of specifications. Please contact OTTO-CHEMIE before issuing specifications.		
Pretreatment:	The adherent surfaces have to be clean, free from fat, dry and sustainable. All adherent surfaces must be clean and any contaminant such as release agents, preserving agents, grease, oil, dust, water, old adhesives or sealants and other substances which could affect adhesion, should be removed.		
Application information:	 Maximum tolerance of mixing ratio: The mixing ratios may vary by a maximum of +/- 10 % in order to have an impact on the curing time. Avoid entrapment of air during mixing. Therefore we recommend to use a mixing equipment. As the filling agents in component A can settle down (sedimentation) during storage , it must be stirred up homogeneously in the original packaging prior to mixing it with component B or prior to filling it into the storage containers of a mixing and dosing installation. Component A does not react with air humidity and is stable under normal conditions (23 °C, 50 % RH). Component B is sensitive to moisture and therefore must be protected from moisture. Advice for the lay out design of the mixing and dosing installation: we advise the use of stainless steel storage containers and EPDM o-ring sealing. To prevent the diffusion of humidity please use hoses with Teflon coating inside. If you decide to use different sealing materials, please contact the Application Engineering department. Please do not use any overpressure to transport component A and B from the storage containers into the mixing and dosing in entrapments and bubbles in the mixed material. The storage container of component A must be equipped with a stirring device in order to avoid sedimentation. 		
Packaging:	Packagings on request		
Safety precautions:	Please observe the material safety data sheet.		
Disposal:	Information about disposal: Please refer to the material safety data sheet.		
Warranty information:	All information in this publication is based on our current technical knowledge and experience. However, since conditions and methods of use and application of our products are beyond our control, we suggest that you test the product before final use. Information given in this technical data sheet and explanations of OTTO-CHEMIE in connection with this technical data sheet (e.g. service description, reference to DIN regulations etc.) is not to be seen as a warranty. Warranties require a separate written declaration of OTTO-CHEMIE to prove their validity. The characteristics stated in this data sheet define the		

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characteristics of the article broadly and concludingly. Suggestions of use are not to be taken as confirmation of the appropriateness for the recommended intended use. We reserve the right to alter the product, adjusting it according to technical progress and new developments. We are at your disposal both for inquiries as well as specific application problems. If a governmental approval or clearance is necessary for the application of our products, the user is responsible for the obtainment of such. Our recommendations do not excuse the user from the obligation to take into consideration the possibility of infringement of third parties' rights and - if necessary - resolving it. For the rest our general terms and conditions apply, in particular regarding a possible liability for defects. You can find our general terms and conditions on our homepage: http://www.otto-chemie.de/en/terms-and-conditions

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