Sicomet 101

June, 2015

SICOMET

PRODUCT DESCRIPTION

Sicomet 101 is a very low viscosity fast-curing ethylcyanoacrylate for bonding a wide range of materials including plastics, rubbers and metals.

Sicomet 101 provides the following product characteristics:

Chemistry Type	Ethyl cyanoacrylate
Appearance	Colourless liquid
(uncured)	
Components	One part – requires no mixing
Viscosity	Very low
Cure	Surface moisture
Application	Instant Bonding
Key Substrates	Plastics, rubbers and metals

FEATURES & BENEFITS

- Excellent adhesion to rubbers and plastics
- Fast Cure
- Easy to apply and dispense
- No mixing required
- Low viscosity allows wicking into small gaps and substrate porosity

Properties of uncured material	Typical value
Specific Gravity @ 25°C	1.05 – 1.10
Viscosity @ 25°C	1 – 30 mPa.s
Flash Point (TCC)	See MSDS

TYPICAL CURING PERFORMANCE

Curing of Sicomet 101 is initiated by surface moisture and handling strength is achieved rapidly between close fitting parts. Fixture time is dependent on the substrate material and gap. Curing continues for at least 24 hours before full strength and chemical/solvent resistance is developed.

Fixture time

Gap fill	0.01 - 0.05 mm		
Cure speed	Aluminium	5-10 seconds	
	Steel	10-30 seconds	
	Zinc dichromate	20-60 seconds	
	Rubber, nitrile	5-10 seconds	
	ABS	5-10 seconds	
	PVC	5-10 seconds	
	Polycarbonate	5-10 seconds	

PERFORMANCE OF CURED MATERIAL

After 24 hours @ 22°C, ISO 4587

Tensile Shear Strength	Typical Value
Steel: Nmm ⁻² (psi)	17 (2,500)
Aluminum: Nmm ⁻² (psi)	15 (2,200)
ABS: Nmm ⁻² (psi)	8* (1,200*)
*Substrate failure	

GENERAL INFORMATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

For safe handling information on this product, consult the Material Safety Data Sheet, (MSDS).

DIRECTIONS FOR USE

- 1. For best performance the surfaces to be bonded should be clean and free from contamination.
- 2. Apply the adhesive sparingly to one surface only.
- 3. Bring the parts together and ensure quick alignment of the surfaces.
- 4. Apply light pressure to spread the adhesive into a thin film and avoid any movement between the parts until initial fixture strength has developed (normally a few seconds).
- 5. Excess adhesive can be wiped away with a suitable solvent.
- 6. Where possible the adhesive should be allowed to develop full strength before subjecting to any service loads (typically 72 hours).

Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

Storage Conditions

Product shall be ideally stored in a dry location in the unopened container. For optimal storage stability the product shall be refrigerated at temperatures between 2-8°C unless otherwise labeled. To prevent contamination of unused product, do not return any material to its original container.



Note

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof in light of the foregoing, Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits. The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.