

Technical Datasheet – X099-41-2

Product Description

X099-41-2 is a 2-part epoxy, which react to form a rigid encapsulant. X099-41-2 has been designed for use either as a hand-mix product, for use through a 2-part cartridge system. X099-41-2 cures at ambient temperature.

Applications

X099-41-2 has been formulated for encapsulating assemblies where low shrinkage is required, together with excellent long-term resistance to temperature fluctuations with low to no water absorption.

Specification

Gel time testing has been performed by pouring slug of 20g mass @ 23°C. This test is not necessarily reflective of use in product, where volume, mass arrangement and temperature may affect the gel times.

Property	Version	Min	Max	Units
Gel Time	X099-41-2	2	4	Minutes
Hardness at Full Cure	X099-41-2	75	85	Shore D

Mix Ratio

By Weight	1.14 Parts A to 1.00 Part B
By Volume	1.00 Parts A to 1.00 Part B

The components should be measured to an accuracy of 2% or better. Care should be taken when measuring by volume, as this is an inherently inaccurate method unless specific volumetric measuring equipment is used.

Typical Properties

Property		Typical Value	
Colour	Part A	Colourless to pale straw	
	Part B	Black	
	Mixed	Black	
S.G.	Part A	1.17	
	Part B	1.04	
	Mixed	1.12	
Full Cure (20°C)		7	Days
Hardness at full cure		80	Shore D
Constant Operating Temperature		-65°C to +105°C	

Instructions For Use

1. Always consult MSDS before using X099-41-2 for the first time.
2. Carry out surface preparation where required.
3. Remove nut, attach mixer nozzle and secure to cartridge.
4. Dispense sufficient adhesive to ensure equal mix and uniform colour.
5. Apply adhesive as per Hawke pouring resin installation instructions.
6. It is always easier to remove any excess adhesive prior to cure using a suitable cleaner.
7. Allow the adhesive sufficient time to achieve gelling before moving components.

Curing Cycle

Once mixed at the 1:1 ratio the working time of the X099-41-2 is the period whereby the adhesive remains fluid and is easily transferrable between two or more mating surfaces. Temperature, volume and substrate have a direct effect on the length of this period as the Advanced Adhesives X099-41-2 cures by an exothermic reaction. Higher temperatures and larger volumes speed the reaction causing a reduction in open and cure time. Lower temperatures and smaller volumes slow the reaction time extending both the open time and ultimate full cure time.

Packaging

Advanced Adhesives X099-41-2 is available in 14ml, 24ml and 50ml cartridges.

Storage & Shelflife

Advanced Adhesives X099-41-2 should be stored unopened in suitable hazardous storage conditions for adhesives that are cool, dry location and out of direct sunlight. Stored correctly, this grade can offer a 24 month shelf life from its manufacture in the UK.

Health and Safety in Use

Advanced Adhesives X099-41-2 is an Epoxy compounds and should not be used without consulting the MSDS which contains full information regarding the use of this product, including Transport, Disposal, Toxicological, Exposure Controls, Accidental Release and First Aid measures essential to the safe use of this product.

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