

SS-EPX20165 BLACK Technical Data Sheet 23/01/2017

SS-EPX20165 BLACK Technical Data Sheet

Very Fast Curing Multi-purpose epoxy adhesive

SS-EPX20165 BLACK Introduction

SS-EPX20165 BLACK is two-part very low viscosity flexible epoxy resin containing a reactive diluent applicable for large castings.

Key Features

- Low viscosity
- Long Pot Life
- Low Shrinkage
- Room Temperature or Heat Cured
- High toughness

SS-EPX20165 BLACK Physical Data (approx. – values)

	Resin	Hardener	Mixed
Colour	Black	Amber	Black
Specific Gravity	1.14	0.93	1.12
Viscosity @ 25°C	1000mPas	250mPas	500mPas

SS-EPX20165 BLACK Cure Schedule (150ml sample)

Temperature	Working Life	Gel Time	Light Handling	Full Cure
25°C	150 Mins	480 Mins	48 hrs	72 hrs
60°C			4 hrs	16 hrs
80°C			2 hrs	4 hrs

The above are typical values and will vary depending on the cured mass and application. Hotter temperatures may be used for faster cure but will result in higher post cure shrinkage and higher cure exotherm. Experimentation and testing is suggested to avoid side effects.

SS-EPX20165 BLACK Approvals

RoHS compliant	Yes
UL94-VO	No
REACH (SVHC concentration)	0%

SS-EPX20165 BLACK storage and shelf life

Material stored in the original unopened containers under cool dry conditions between 15°C and 25°C will have a shelf life of at least two years. Once used the containers must be kept sealed to prevent effects from water, air or contaminants.

SS-EPX20165 BLACK Cleaning

All equipment contaminated with mixed material should be cleaned before the material has hardened. Use a suitable non-flammable cleaning agent.

SS-EPX20165 BLACK Mixing ratio

Mix ratio by weight	100:40
Mix ratio by volume	100:48

Property	Unit	Result
Shore Hardness	Shore A	65
Operating temperature range	°C	-50 to +150
Thermal conductivity	W/mK	0.20
Flexural Strength		Flexible
Compressive strength	MPa	10-15
Co-efficient of expansion	Ppm/°C	80-100
Volume Resistivity	Ohm.cm	1.2 x 10 ¹⁴
Permittivity	50Hz	3.9 – 4.2
Electric strength	kV/mm	12-14
Tensile strength	MPa	10
Elongation at break	%	25
Water absorption		
	(24 hours @ 23°C)	mg 15-25
	(30 minutes @ 100°C)	mg 40-50

SS-EPX20165 BLACK Health and Safety

Epoxy resin systems may cause sensitisation by skin contact or inhalation may be corrosive, harmful or toxic. It is therefore strongly recommended that skin and eye contact is avoided by using of appropriate personal protective equipment such as gloves, safety glasses or goggles and overalls. Wash any contamination from the skin immediately and thoroughly and do not eat, smoke or drink in the working vicinity.

Under normal working conditions a good source of ventilation is adequate, however if the material is heated, or where vapour levels are likely to exceed the occupational exposure limits appropriate respiratory protection must be worn. Local exhaust ventilation (LEV) may be required especially for curing ovens or where large volumes of material are curing. The above is given as a guide only; please refer to SS-EPX20165 BLACK A/B Health and Safety data or our Technical Service department for individual/specific advice.

SS-EPX20165 BLACK Technical Data Sheet 23/01/2017

SS-EPX20165 BLACK Packaging

Available in bulk, twin packs, kits and Cartridges

Limited Warranty

Silicone Solutions Ltd warrants that its product will conform to Silicone Solutions Ltd internal specifications at the time of application or use, provided that the product is stored in accordance with Silicone Solutions Ltd recommendations and used or applied before the earliest of (1) the "use before date" indicated on the product package, (2) six months from the date of shipment, or (3) expiration of such other period or recommended storage time stated in the Silicone Solutions Ltd literature for the product. If notified in writing of a claim within six months of the products use of application, Silicone Solutions Ltd will at its option replace or refund the purchase price of any Silicone Solutions product with does not satisfy the foregoing warranty.

Limitation of Liability

Silicone Solutions Ltd shall in no event whether the claim is based on warranty, contract tort, strict liability, negligence or otherwise be liable for incidental or consequential damages, or for any other damages in excess of the amount of the purchase price. Note: For many products, Silicone Solutions Ltd may be able to offer a more extensive application specific warranty. For further information, contact Silicone Solutions Ltd Sales.



For additional technical & application information:

Call: +44 (0) 1204 863290
Email: sales@silicone-solutions.co.uk
www.silicone-solutions.co.uk