

SS-PU20185 BLK Technical Data Sheet 09/01/2017

SS-PU20185 BLK

Technical Data Sheet

A two-Part, General Purpose encapsulation system

SS- PU20185 BLK Application

- PCBs
- Transformers
- Sensors
- Low to medium voltage cable joints

SS- PU20185 BLK Introduction

Key Features

- Non-toxic
- Low exotherm
- High impact Strength
- Good electrical insulation characteristics
- RoHS & WEEE Compliant

SS- PU20185 BLK Physical Data (approx. – values)

Physical Data	Resin	Hardener	Mixed
Colour	Black	Brown	Black
Specific Gravity	1.32	1.24	1.30
Viscosity (mPas) @25°C	3000-5000	200-300	1500-3000

SS- PU20185 BLK Cure Schedule (150ml sample)

Temperature	Room Temperature (20°C-25°C)	60°C	80°C
Working Life (minutes)	15	-	-
Gel Time (minutes)	60	-	-
Light Handling (Hours)	24	4	2
Full Cure (Hours)	168	48	24

SS- PU20185 BLK Application

RoHS Compliant	Yes
UL94 V-0	No
REACH (SVHC concentration)	0%

SS- PU20185 BLK Storage and shelf life

Material stored in the original unopened containers under cool dry condition between 15° and 25°C will have a shelf life of at least 12 months. Once used keep the containers sealed to prevent effects from water, air or contaminants.

SS- PU20185 BLK Processing

Ratio by Weight	4.0:1
Ratio by Volume	3.8:1

Property	UNIT	Value
Hardness	Shore A	85
Operating Temp	°C	-40 to+125
Thermal Conductivity	W/mK	0.214
Tensile Strength	MPa	3.4
Elongation at Break	%	39
Loss Tangent	50Hz	0.04
Permittivity	@ 50Hz	3.4
Volume Resistivity	Ohm.cm	1.2x12 ¹²
Shrinkage	%	1.5
Coefficient of linear Expansion	Ppm/°C	50-75
Comparative tracking index	V	>600
Water Absorption 24hr@25°C	%	0.05
Flame Retardant		No
Peak Exotherm (50g mass)	°C	30
Dielectric strength	kV/mm	18
Heat deflection		Flexible
Tg	°C	8

SS- PU20185 BLK Packaging

SS-PU20185 BLK is available in bulk, twin packs and Kits.

Health and Safety

Polyurethane 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 the 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 within 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 and curing. The above is given as a guide only; please refer to SS-PU20185 BLK Health and Safety data or our Technical Service Department for individual/specific advice.

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.

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