

SS-PU23930 PEARL Technical Data Sheet 12/01/2017

SS-PU23930 PEARL

Technical Data Sheet

A two-Part, flexible Polyurethane

SS- PU23930 PEARL Application

A two-part flexible room temperature curing polyurethane resin with an opalescent finish.

- Encapsulation of LED arrays
- Lighting equipment.
- High Quality Castings

SS- PU23930 PEARL Key Properties

Key Features

- Excellent long term UV stability
- Non-toxic
- Scratch and mark resistant
- High mechanical strength
- Easy to mix and process

SS- PU23930 PEARL Physical Data (approx. – values)

Physical Data	Resin	Hardener	Mixed
Colour	Clear	Clear	Opal
Specific Gravity	1.04	1.16	1.10
Viscosity (mPas) @25°C	600	600	600

SS- PU23930 PEARL Cure Schedule (150ml sample)

Temperature	Room Temperature (20°C-25°C)	60°C	80°C
Working Life (minutes)	20	-	-
Gel Time (minutes)	30	15	-
Light Handling (Hours)	60	12	6
Full Cure (Hours)	48	24	12

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

SS- PU23930 PEARL 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- PU23930 PEARL Processing

Ratio by Weight	0.90:1
Ratio by Volume	1:1

Property	UNIT	Value
Hardness	Shore D	30
Operating Temp	°C	-55 to+120
Thermal Conductivity	W/mK	0.25
Tensile Strength	MPa	46
Elongation at Break	%	2-4
Compressive Yield Strength	MPa	60
Coefficient of Linear expansion	Pp/m°C	~150
Volume Resistivity	Ohm.cm	1.3 x 10 ¹³
Surface Resistivity	Ohm	1.4 x 10 ¹²
Electric Strength	kV/mm	20
Water Absorption 30days@25°C	%	0.87

SS- PU23930 PEARL Packaging

SS-PU23930 PEARL 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-PU23930 PEARL 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.

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

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Ltd may be able to offer a more extensive application specific warranty. For further information, contact Silicone Solutions Ltd Sales.