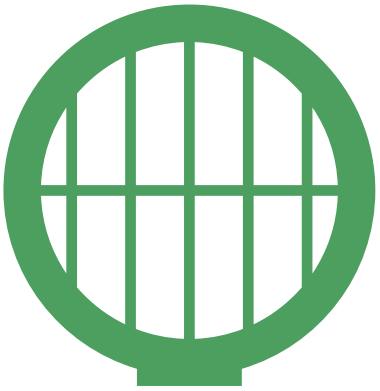

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MATERIALS
SAMPLE PREPARATION & CHARACTERISATION

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PDMS

Polymethylsiloxane (PDMS) is the most widely used silicon-based organic polymer and is particularly known for its unusual rheological (or flow) properties. It's optically clear, inert, and non-flammable.

PDMS is commonly used as a stamp resin in the procedure of soft lithography making it one of the most common materials used for flow delivery in microfluidics chips.

SOME APPLICATIONS

- Power supplies
- Connectors
- Sensors
- Industrial controls
- Transformers
- Amplifiers
- High voltage resistor packs
- Relays
- Adhesive/Encapsulant for solar cells
- Adhesive handling beam lead integrated circuits during processing
- LED lighting encapsulation

SYLGARD® 184

Sylgard® 184 is a Dow Corning silicone encapsulant, mainly used in electronic applications.

PDMS* provides unparalleled protection for electronic modules and devices ranging from relatively simple to highly complex architectures and geometries. Silicones work as durable dielectric insulation, as barriers against environmental contaminants, and as stress-relieving shock and vibration absorbers over a wide temperature and humidity range.

In addition to sustaining their physical and electrical properties over a broad range of operating conditions, silicones are resistant to ozone and ultraviolet degradation and have good chemical stability.

*Polymethylsiloxane

Sylgard®184

DESCRIPTION & FEATURES

Sylgard® 184 is supplied as two-part liquid component:

- Mix Ratio (by weight or volume): 10:1
- Components (as supplied): Base/Curing agent
- Transparent encapsulant with good flame resistance
- Flowable
- Room temperature or heat cure
- High tensile strength

When liquid components are thoroughly mixed, the mixture cures to a flexible elastomer, which is suited for the protection of electrical/electronic applications. Sylgard 184 cures without exotherm at a constant rate regardless of sectional thickness or degree of confinement. It requires no post cure and can be placed in service immediately following the completion of the cure schedule with an operating temperature range of -45 to 200°C.

TYPICAL PROPERTIES

Color	Clear
Dynamic viscosity (mixed)	3500 mPa.s
Hardness, Durometer	43 Shore A
Specific gravity (cured)	1.03
Working time (25°C)	90 min
Cured time (25°C) (150°C)	48 h 10 min
Refractive Index @ 589 nm	1.4118
Shelf life from date of manufacture (25°C)	24 months

PACKAGING

1.1 kg and 5.5 kg (available on stock) / 22 kg / 224.5 kg.

RTV615

RTV615, is a Momentive silicone rubber compounds used for protection of electronic components and assemblies against shock, vibration, moisture, ozone, dust, chemicals, and other environmental hazards by potting or encapsulation of the components and assemblies.

DESCRIPTION & FEATURES

RTV615 is supplied as two-part liquid components kits with curing agent in matched kits which are designed for use at a convenient 10:1 ratio by weight. This compound is clear and colorless with a low viscosity.

- Mix Ratio: 10:1
- Low viscosity
- Excellent electrical insulation and shock resistance
- Cure rate can be accelerated by heat
- Chemical composition contains no solvents for ease of use on production lines
- Reversion resistance and hydrolytic stability permit use in high humidity environments at elevated temperatures
- Clarity permits visual inspection for easy identification and repair of encapsulated parts

The operating temperature range is -60°C to 204°C and to achieve optimum properties an elevated temperature cure or a cure time of 7 days at room temperature is required.

This silicone rubber compound requires a primer to bond to non-silicone surfaces.

The optical clarity of these silicone rubber compounds suggests evaluation for applications such as potting solar cells for maximum light transmission and electronic assemblies where component identification is necessary or desirable.

RTV615

TYPICAL PROPERTIES

Color	Clear
Dynamic viscosity (mixed)	4000 mPa.s
Hardness, Durometer (cured)	44 Shore A
Specific gravity (cured)	1.02
Working time (25°C)	240 min
Cured time (25°C) (150°C)	24 h 15 min
Refractive Index @ 589 nm	1.406
Shelf life from date of manufacture (25°C)	24 months

PACKAGING

500 g / 5 kg (available on stock) / 20 kg

QSIL216

Qsil216 is an ACC silicone encapsulent designed for electronic potting and encapsulation applications. It offers good protection against chemicals, environmental contamination, mechanical shock, vibration and impact damage.
It can be employed in areas where low flammability is a prerequisite.
The cured elastomer can be repaired.
The component parts have relatively low viscosities and are readily mixed either by hand or machine.

DESCRIPTION & FEATURES

Qsil216 is supplied as two-part liquid.

- Mix Ratio: 10:1
- Non yellowing under UV light
- Optically clear
- Low Viscosity
- Wide temperature range

QSil216

TYPICAL PROPERTIES

Color	Clear
Dynamic viscosity (mixed)	4500 mPa.s
Hardness, Durometer (cured)	40 Shore A
Specific gravity (cured)	1.02
Working time (25°C)	240 min
Cured time (25°C) (100°C)	20h 60 min
Refractive Index @ 589 nm	1.406
Shelf life from date of manufacture (25°C)	24 months

PACKAGING

250 g / 1.1 kg / 22 kg

	INCLUDED ANGLE: 60°	INCLUDED ANGLE: 75°	INCLUDED ANGLE: 90°	INCLUDED ANGLE: 120°
Pen	06004-AB	06005-AB	05022-AB	06006-AB
Refills	06004R-AB	06005R-AB	05023-AB	06006R-AB

GEM® SCIENTIFIC BLADES

These are the highest quality single-edge razor blades useful for mincing specimens, trimming tissue blocks, etc.

Dimensions:
Length: 40 mm
Width: 20 mm
Thickness: 0.23 mm along the cutting edge; up to 1 mm along the top of the blade.
Hole: 6.1 mm high x 2.5 mm

Packaging:
Handy packs of ten are secured within an all plastic safety dispenser.

DESCRIPTION	P/N
Individual cartridges (Safety Pkg/10)	05025-AB
Bulk package of 100 blades in one container (Bulk Pkg/100)	05025-MB

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Materials L 2018-1

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