

## ACC Silicones have been manufacturing silicone compounds for over 20 years

ACC Silicones have been manufacturing silicone compounds for over 20 yrs and has gained an enviable reputation for proven performance and quality with materials being certified for use in the most demanding applications within the aerospace industry. Much of ACC's research work has been focused on Electrical and Electronic applications developing coatings, thermal transfer compounds and non-corrosive sealants.

Our customer focused development program and flexible-manufacturing plant enables us to keep pace with the needs of today's modern production methods and design requirements. Qualified, experienced sales and technical staff are readily available to make site visits and advise on product selection and production methods.

ACC Silicones group of companies has grown over recent years to include technical research and production facilities in the UK, mainland Europe and the US. Our expertise extends into all areas of 1 and 2-Part RTV silicone chemistry, with a strong bias towards application-based solutions.

### Bespoke Production Facilities

Our flexible facilities based upon batch production allow us to offer formulations to meet very specific application requirements.

Subject to strict commercial evaluation we are able to chemically engineer our products and change the following properties.

- **Rheology: paste to free flowing low viscosity**
- **Cure speed and tack free times**
- **Thermal conductivity**
- **Hardness**
- **Colour**
- **Operating temperature range**
- **Cure mechanism**
- **Packaging and delivery systems**
- **Own label**

### Focused R&D on electrical and electronics applications throughout the world

# World Class Silicones and Chemicals for Electrical and Electronic Applications

I-Part Silicone Adhesive Sealants  
Potting and Encapsulation Compounds  
Thermal Transfer  
Conformal Coatings  
High Purity Cleaners



**acc**<sup>®</sup>  
silicones



## 1-Part Silicone Adhesive Sealants

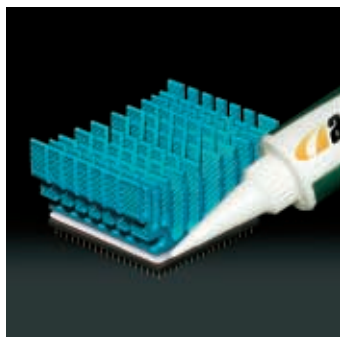
ACC Silicones have over 20 years experience manufacturing 1-Part adhesives for high performance applications. New patented technology has produced high temperature, non-corrosive RTV's with fast cure times. Modified rheology and filler systems ensure ACC have products to meet the demands of today's electronic manufacturer.

- Neutral Cure non-corrosive
- UL94 V-0
- Thermally Conductive
- High Temperature +300°C
- Flowable and Paste
- RTV and Heat Cured

New Code	Previous Code	Rheology	RTV or Heat cure	Colour	Working Temp °C	Hardness Shore A	Tensile Mpa	Elongation %	Tack Free mins	Max Cure Hrs	Thermal Conductivity W/m <sup>2</sup> K
<b>1-Part Non Corrosive Neutral Cure Adhesive Sealants</b>											
AS1720	1071	Flowable	RTV	Trans	-55 to 180	32	1.3	330	15	50	0.17
AS1700	1070	Paste	RTV	Trans	-55 to 180	33	2.0	500	15	36	0.18
AS1701	1073	Paste	RTV	Black	-50 to 220	45	1.5	120	20	36	0.60
AS1820	1080w	Flowable	RTV	White	-50 to 220	30	2.0	250	5	14	<0.3
AS1821	1080b	Flowable	RTV	Black	-50 to 220	30	2.0	250	5	14	<0.3
AS1822	1081w	Flowable	RTV	White	-50 to 220	35	2.2	275	5	14	<0.3
AS1823	1081b	Flowable	RTV	Black	-50 to 220	35	2.2	275	5	14	<0.3
AS1824	1087	Flowable	RTV	Red	-50 to 220	35	2.5	200	6	8	<0.3
AS1825	New	Paste	RTV	Black	-50 to 220	30	1.4	290	15	<24	0.20
AS1800	1082w	Paste	RTV	White	-50 to 220	39	2.0	200	3-4	14	<0.3
AS1801	1082b	Paste	RTV	Black	-50 to 220	39	2.0	200	3-4	14	<0.3
AS1803	1084w	Paste	RTV	White	-50 to 220	70	3.4	100	3-4	8	1.70
AS1804	1086b	Paste	RTV	Black	-50 to 250	35	2.5	200	6	8	<0.3
AS1805	1088r	Paste	RTV	Red	-50 to 300	50	2.0	200	4	8	<0.3
AS1400	1500t	Paste	Heat	Trans	-50 to 200	35	5.0	450	N/A	N/A	0.25
AS1401	1500b	Paste	Heat	Black	-50 to 200	35	5.0	450	N/A	N/A	0.25
Qsil 1000	Qsil 1000	Flowable	Heat	Red	-50 to 200	43	2.8	180	N/A	N/A	0.31
Qsil 1001	Qsil 1001	Flowable	Heat	Biege	-50 to 200	35	1.6	265	N/A	N/A	0.21

# Thermal Transfer

The transfer of heat away from sensitive components is a key design requirement within many electronic applications. Using the very best raw materials together with proven silicone chemistry, ACC Silicones technicians have formulated a wide range of thermally conductive materials.



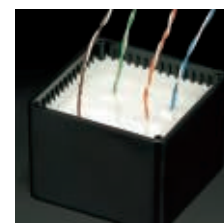
- 1-Part Adhesive Sealants
- 2-Part Encapsulants
- 2.5W/m<sup>2</sup>K and above
- Non Setting compounds

New Code	Previous Code	Rheology	RTV or Heat cure	Colour	Working Temp °C	Hardness Shore A	Thermal Conductivity W/m <sup>2</sup> K
<b>1-Part Non Corrosive Neutral Cure Adhesive Sealants</b>							
AS1607	1075	Paste	RTV	White	-50 to 220	55	1.58
AS1701	1073B	Paste	RTV	Black	-50 to 220	45	0.60
AS1803	1084w	Paste	RTV	White	-50 to 220	70	1.70
AS1802	1084G	Paste	RTV	Grey	-50 to 220	70	2.50
<b>1-Part Non Setting Compounds</b>							
SG500	EE6023	Paste	N/A	White			0.77
SG501	EE6028	Paste	N/A	White			0.77
<b>2-Part Potting &amp; Encapsulants</b>							
Q-Sil 553	Q-Sil 553	Liquid	RTV	Grey	-60 to 260	32	0.68
SE2004	2081	Liquid	Heat	Pink	-60 to 250	55	0.62
SE2003	2080	Liquid	Heat	Pink	-60 to 250	80	1.27

# Potting and Encapsulation Compounds

Modern electronic components require protection from vibration, harsh environmental conditions and excessive heat. The wide selection of materials available from ACC provides this protection, satisfies electrical design specifications and are easy to process.

- RTV and Heat Cured
- Opaque and Optically Clear
- Thermally Conductive
- UL94 V-0
- Silicone Gels
- Range of Hardness's

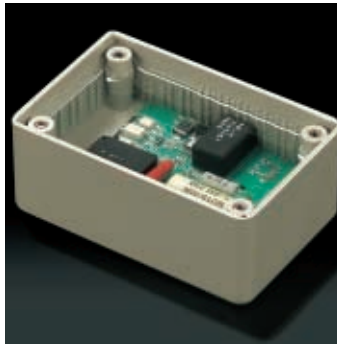


New Code	Previous Code	Cure	Colour	Working Temp °C	Hardness Shore A	Mixed Viscosity mPa	UL 94V-0	Cure Speed 25°C	Cure Speed 100°C	Pot Life (hra) 25°C	Thermal Conductivity W/m <sup>2</sup> K
<b>1-Part Silicones</b>											
AS1720	1071	RTV	Trans	-55 to 180	32	40000		36h	N/A	N/A	0.17
AS1820	1080W	RTV	White	-60 to 220	30	10000		<14h	N/A	N/A	< 0.3
AS1821	1080B	RTV	Black	-60 to 220	26	30000		<14h	N/A	N/A	< 0.3
Q-Sil 1000	Q-Sil 1000	Addition	Red	-50 to 300	43	40000		N/A	1h	N/A	0.31
<b>2-Part Silicone Compounds</b>											
Q-Sil 12	Q-Sil 12	Condensation	Clear	-50 to 150	18-20	1300		24h	N/A	75mins	< 0.3
SE2005	2005	Condensation	White	-60 to 220	45	8500		24h	N/A	1 - 3 hrs	0.24
Silcoset 101	Silcoset 101	Condensation	Red	-60 to 250	55	40000		24	N/A	1 to 3 hrs	0.37
Q-Sil 215	Q-Sil 215	Addition	Clear	-60 to 220	40	5000		24h	Yes	4h	0.18
Q-Sil 430	Q-Sil 430	Condensation	Grey	-60 to 250	30-35	25000	Yes	<4h	N/A	10-15mins	< 0.3
Q-Sil 550	Q-Sil 550	Addition	Black	-60 to 275	55	4000	Yes	24h	1h	30 minutes	0.37
Q-Sil 553	Q-Sil 553	Addition	Black	-60 to 260	32	5000	Yes	24h	1h	120 mins	0.68
SE2003	2080	Addition	Pink	-60 to 250	80	35000		24h	30 mins	30min	1.27
SE2004	2081	Addition	Pink	-60 to 250	55	60000		24h	1h	30min	0.62
<b>Silicone Gels</b>											
Q-Gel 300	Q-Gel 300	Addition	Clear	-55 to 200	<10	1000		20h	1h	3	< 0.3
Q-Gel 301	Q-Gel 301	Addition	Clear	-55 to 200	<10	1500		1h	10mins	20 mins	< 0.3
Q-Gel 310	Q-Gel 310	Addition	Clear	-55 to 200	<10	1000		20h	1h	45mins	< 0.3
Q-Gel 311	Q-Gel 311	Addition	Clear	-55 to 200	<10	1000		1.5h	10mins	3-5mins	< 0.3
Q-Gel 320	Q-Gel 320	Addition	Clear	-55 to 200	<10	8000		24h	1hr	>8h	< 0.3

# Conformal Coatings

Protecting the PCB board in critical applications requires a variety of conformal coatings. Technical requirements and production processes are brought together using one of the specially formulated ACC Silicones conformal coatings. For ease of use they are made available in both bulk and aerosol packages.

- 100% Solids Silicone
- Solvanted Silicone
- Polyurethane
- Acrylic



New Code	Previous Code	Type	Solvanted	Cure	Specific Gravity	Working Temp oC	Mixed Viscosity mPa	Thinners
ACC 10	ACC 10	Silicone	Yes	RT	0.90	-55 to 130	185 - 250	ACC30
ACC 11	ACC 11	Acrylic	Yes	RT	0.90	-55 to 130	250 - 350	ACC31
ACC 12	ACC 12	Polyurethane	Yes	RT	0.90	-55 to 130	250 - 350	ACC32
QLE 1050	QLE 1050	Silicone	No	Heat	0.97	-60 to 204	500	N/A
QLE 1100	QLE 1100	Silicone	No	Heat	1.01	-60 to 204	1000	N/A



# High Purity Cleaners

ACC Silicones compliment their range of compounds with these high purity cleaners essential for fast, effective production. They can be used for the preparation and cleaning of PCB's, components and the maintenance of production equipment.

- Water based
- Bulk and Aerosol
- High Solvency
- Concentrates

New Code	Previous Code	Product	REMOVES						COMPATABILITY	
			Flux Residue	Uncured SMT Adhesive	Grease & Oil	Silicones	Coatings	Plastics & Painted Surfaces	Untreated Metal	
ACC 50	ACC 50	PCB Cleaner in aerosol	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
ACC 51	ACC 51	PCB Cleaner in bulk	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
ACC 52	ACC 52	Degreaser in aerosol	Yes	Yes	Yes	Yes	No		Yes	
ACC 53	ACC 53	Degreaser in bulk	Yes	Yes	Yes	Yes	No		Yes	
ACC 70	ACC 70	Aqueous PCB Cleaner	Yes	Yes	Yes	Yes	No	Yes		
ACC 71	ACC 71	Aqueous PCB Cleaner Conc	Yes	Yes	Yes	Yes	No	Yes		
ACC 72	ACC 72	Aqueous Foaming Cleaner	Yes	Yes	Yes	Yes	No	Yes		

# Synthetic Peelable Mask

## Semi Permanent Peelable Mask

ACC13	Synthetic Peelable Mask	Solvent Free	Heat Cured
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During the soldering and coating process of PCB's certain areas need to be protected or masked.

Made entirely from synthetic acrylic latex ACC Peelable Mask will withstand fluxing, wave soldering, coating and cleaning operations. Unlike natural rubber latex it is ammonia free and therefore non-corrosive to copper, gold and pre soldered surfaces. Long shelf life -up to 18 month.

- Fast Heat cured
- Thixotropic
- Will withstand 260°C
- Easy peel off
- Non Soluble
- Dries to Red Colour





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