INDUSTRY
SOLUTIONS.

Material
Solutions.

CHT
SMART CHEMISTRY
WITH CHARACTER.

WORLD CLASS SILICONES FOR WORLDWIDE SOLUTIONS

SILICONE ADHESIVE SEALANTS
POTTING & ENCAPSULATION COMPOUNDS
THERMAL TRANSFER MATERIALS
CONFORMAL COATINGS
GREASES & PRIMERS

SILICONES FOR TECHNICAL APPLICATIONS

CHT have over 40 years' experience manufacturing 1-Part adhesives for high performance applications. Using a variety of cure mechanisms, modifications can be made to the rheology, hardness, elasticity, cure speed, extrusion rate and compatibility with substrates.

Industries served:
Aerospace, Electronics, Automotive, Photovoltaics, Lighting & LEDs, Food Processing, Offshore, Construction, Textiles, Medical, Marine, Solar, Rail, and Utilities

Typical applications involve:
Bonding, Gasketing, FIPG, Sealing, Anti-slip for Surgical Appliances & Hosiery, Electrical Insulation, Environmental Protection, Coatings, Vibration Control

ELECTRONIC GRADES

A range of non-corrosive adhesives specifically formulated for use in the electronics industry. Patented chemistry provides a wide range of physical properties to meet most application requirements.

PHOTOVOLTAIC ADHESIVES

CHT adhesives are particularly well suited to the applications found in the Solar and Photovoltaic markets. These materials are neutral cure with excellent adhesion to the substrates used in PV manufacturing.

HEAT CURED

Improve productivity with our platinum curing adhesives providing fast cure through in (5 – 10 mins) at temperatures between 100°C and 150°C.

FOOD CONTACT

CHT have several adhesive sealants that can be used in food preparation areas and are suitable for food contact applications. For a more detailed explanation of FDA compliance see Data sheets.

- **Neutral Cure non-corrosive**
- **High Temperature to +300°C**
- **Thermally Conductive**
- **RTV and Heat Cured**

Modern electronic components require protection from vibration, harsh environmental conditions and excessive heat. CHT have a very wide range of compounds that will not only offer that protection but also transfer heat or transmit light.

POTTING AND ENCAPSULATION COMPOUNDS

CHT have many products available for the general potting and encapsulation of electronic components. A range of hardnesses enable careful product selection ensuring that components are not damaged by thermal expansion during extreme temperature cycling.

Products:

- UL 94 V-0 Approved
- Opaque and Optically Clear
- RTV and Heat Cured
- High Temperature to + 300 °C

SILICONE GELS

Silicone gels now perform key roles within many electronic and lighting applications. They are soft and resilient providing protection from vibration and shock without stressing delicate components. Optically clear gels with high refractive indexes improve light transmission in LED's and PV Modules.

- Optically Clear
- Low Viscosity
- RTV and Heat Cured
- Thermally Conductive

SILCO**THERM**® THERMAL TRANSFER MATERIALS

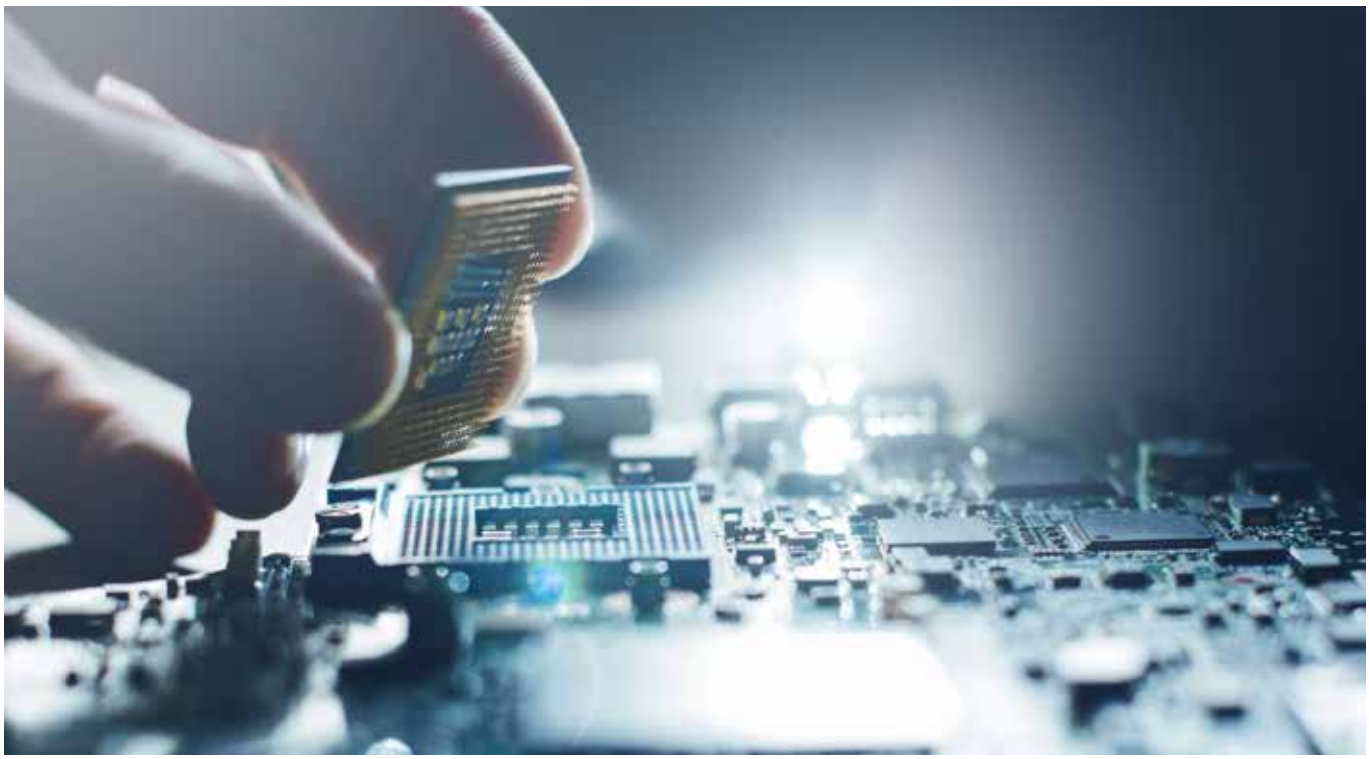
The transfer of heat away from sensitive components is a key design requirement in many electronic applications. CHT technicians have formulated a wide range of thermally conductive materials which can be used for bonding, sealing and encapsulating components.

- Adhesives
- Potting Compounds
- Gap Fillers
- Non-Curing Pastes

SILCOSET® BRAND

The Silcoset® trade name is well respected within the aerospace industry as a high-performance range of silicone materials, including adhesive sealants and potting compounds. Major OEM's have approved these materials for use within their products.

- High temperature stability
- Aerospace & MOD Approved
- Resistance to many chemicals
- Adhesion to a range of substrates



MIL-A-46146B GRADES

Tested to meet the demanding MIL-A-46146B standard, this range of products have exceptional strength making them ideal for the most demanding of applications.

- High strength
- Fast cure and skinning times
- Wide Temperature -60°C to +316°C
- Flowable and Paste

SILICONE PRIMERS

For difficult substrates or very demanding operating conditions the use of a suitable primer is recommended to improve adhesion. CHT have produced a comprehensive guide to primer and sealant selection and this is freely available on request or by visiting our web site.

CHT primers can be used with

- 1 & 2 Part silicone elastomers
- Addition and Condensation cure systems
- Most plastics, wood, metals and glass

SILICONE GREASE

Silicone greases are very durable and may be used to lubricate rubber, plastic and metal to rubber or plastic interfaces. They provide excellent protection against moisture and other harsh environmental conditions and high voltage insulation. Some are approved for use in aerospace, MOD and with potable water.

- High Voltage Insulation
- Thermally Conductive
- Water potable
- NATO Approved

TWIN PACK ADHESIVES

CHT have produced two component accelerated cure adhesives which are supplied in a 10:1 cartridge system. The silicone is thoroughly mixed using a disposable static mixer with a specially designed gun.

- Fast cure times
- Robust gun
- Guaranteed correct mix ratio
- Clean and simple to use

CONFORMAL COATINGS

For protection of PCB boards our range of coatings include acrylic and silicone. Room temperature cure coatings have 100% solids. Silicone coatings are environmentally friendly and cure without the use of expensive ovens.

- Low viscosities
- UV Trace for visual identification
- Solvent free materials
- Excellent adhesion

MANUFACTURING SILICONE COMPOUNDS FOR OVER 40 YEARS

CHT have acquired an enviable reputation for producing high quality specialist chemicals which have been proven to perform to the highest standards in the most demanding applications. With the acquisition in 2017 of the ICM Silicones group, including ACC Silicones Ltd, Quantum Silicones and ICM Products, they have further enhanced their capabilities, industry knowledge and global reach within the silicone market. Key industries serviced include the aerospace, electronics and automotive industries.

CHT have extensive R&D facilities located throughout the world and much of our research work is focused on electrical and electronic applications developing coatings, thermal transfer compounds and neutral cure sealants. Our customer focused development programme and flexible production facilities enable 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 to advise on product selection and production methods. Our expertise extends into all areas of 1 and 2 part RTV silicone chemistry with a strong bias towards application based solutions.

The enlarged CHT silicones expertise enables our customers to benefit from technical and manufacturing support within Europe, China and the USA.

BESPOKE SERVICE

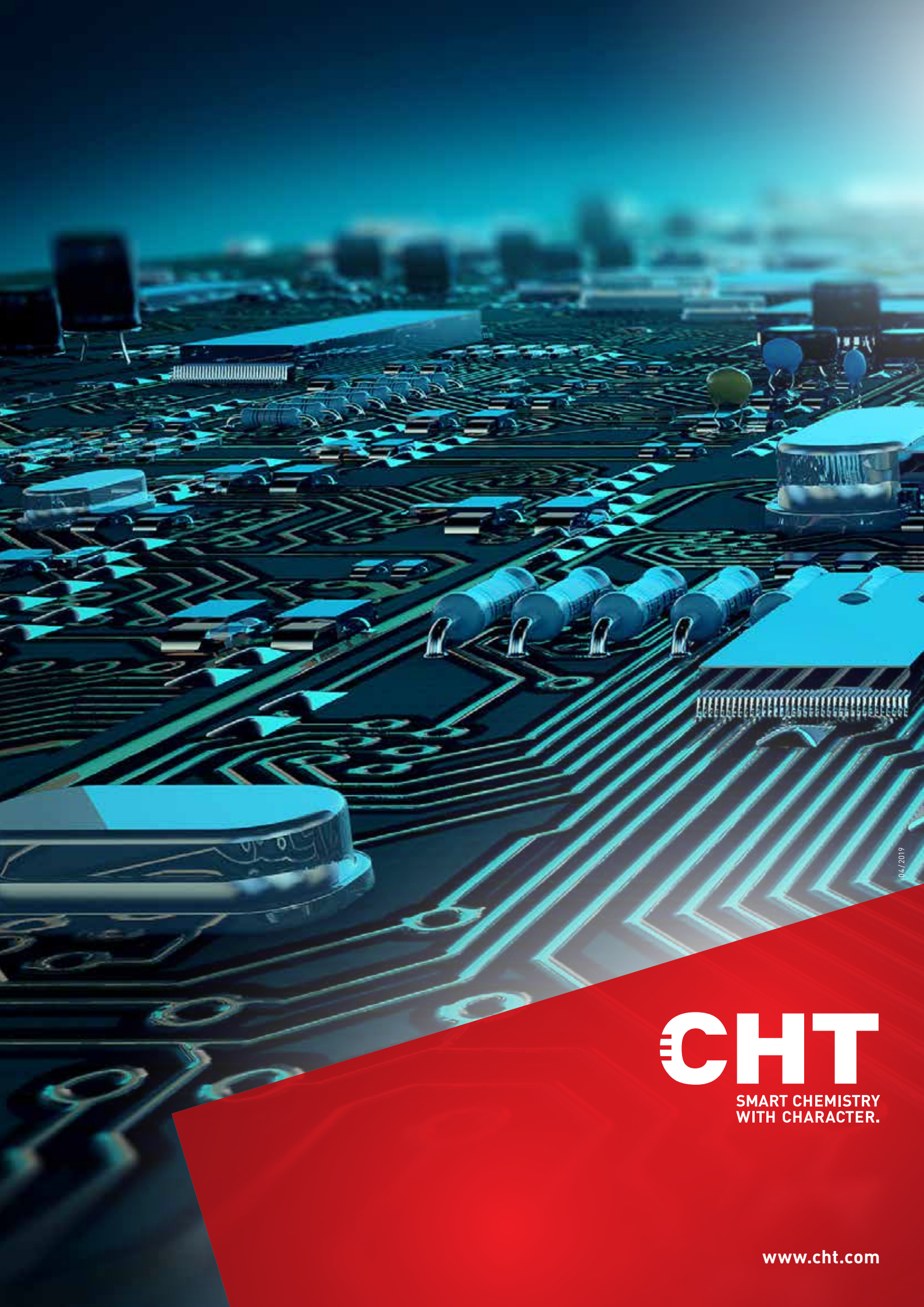
Our adaptable facilities based upon batch production allow us to offer formulations developed to meet very specific application requirements. Subject to strict commercial evaluation we can chemically engineer our products and change any of the following properties:

- 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

We are CHT, Smart Chemistry with Character. Together with ICM, ACC and QSi we are the most customer centric specialty silicones expert. We are committed to finding your individual solution.

CHALLENGE US NOW!

Get in touch with us!
silicone-experts.cht.com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ADHESIVES SEALANTS & SILICONE GREASES

ADHESIVE SEALANTS

Product Code	Type	Rheology	Viscosity mPa.s	RTV or Heat cure	Colour	Min Working Temp - °C	Max Working Temp +°C	Duro Sh A	Tensile MPa	Elongation %	Tack Free Time mins	Max Cure 3mm Hrs @25°C	Thermal Conductivity W/mK
1-Part Silcoset Adhesive Sealants													
Silcoset 151	Acetoxy	Self Level	210000	RTV	White	-60	300	43	2.93	180	10	<12	0.20
Silcoset 152	Acetoxy	Paste		RTV	White	-60	300	40	2.31	240	2	7	0.20
Silcoset 153	Acetoxy	Paste		RTV	Trans	-60	250	39	2.32	280	4	7	0.20
Silcoset 158	Acetoxy	Paste		RTV	Black	-60	300	38	2.30	290	4	7	0.20
1&2 Part Industrial Adhesive Sealants													
Alpatec 5663/20	Acetoxy	Flowable	8500	RTV	Black	-60	200	15	0.35	350	16	24	0.20
AS1500	Acetoxy	Paste		RTV	White	-50	300	39	2.40	270	3	7	0.20
AS1502	Acetoxy	Paste		RTV	Grey	-50	300	52	3.00	205	4	7	0.20
AS1504	Acetoxy	Paste		RTV	Red	-50	300	35	2.50	410	4	7	0.20
AS1523	Acetoxy	Flowable	70000	RTV	Trans	-50	250	25	4.90	655	11	<14	0.20
AS1524	Acetoxy	Flowable	60000	RTV	White	-50	250	24	5.00	600	10	<14	0.20
AS1525	Acetoxy	Flowable	60000	RTV	Trans	-50	250	30	1.00	190	7	<24	0.20
AS2500	Acetoxy	Paste		RTV	Black	-65	250	39	2.32	280	4	1.5	0.20
AS2502	Acetoxy	Paste		RTV	Red	-65	250	30	1.5	260	4	<1	0.20
1-Part Low Corrosive Industrial Sealants													
AS1603	Oxime	Paste		RTV	Trans	-50	220	33	2.15	300	5	12	0.20
AS1604	Oxime	Paste		RTV	Black	-50	240	50	2.00	250	3	<12	0.30
AS1606	Oxime	Paste		RTV	Trans	-50	220	25	1.50	530	8	10	0.20
AS1607	Oxime	Paste		RTV	White	-50	220	70	2.90	70	1	<9	1.58
AS1620	Oxime	Flowable	26000	RTV	Trans	-50	220	25	2.00	400	14	<24	0.20
AS1621	Oxime	Flowable	24000	RTV	White	-50	230	24	2.00	410	19	<24	0.20
AS1622	Oxime	Flowable	23500	RTV	Black	-50	275	24	1.90	390	13	<24	0.20
AS1623	Oxime	Flowable	6000	RTV	Red	-65	250	24	1.20	180	19	24	0.20
AS1626	Oxime	Flowable	24000	RTV	Trans	-50	200	28	2.17	156	10	24	0.20
1&2 Part Non-Corrosive Neautral Cure Adhesive Sealants (Electronic Grades)													
AS1402	Addition	Paste		Heat Cured	Trans	-50	200	30	1.50	295			0.20
AS1420	Addition	Flowable	43000	Heat Cured	Grey	-50	260	67	3.10	70			1.38
AS1421	Addition	Paste	140000	Heat Cured	Grey	-50	210	56	2.20	105			2.10
AS1700	Alkoxy	Paste		RTV	Trans	-50	200	30	2.43	545	10	36	0.20
AS1701	Alkoxy	Paste		RTV	Black	-50	220	52	2.35	200	3	24	0.60
AS1721	Alkoxy	Self Level	95000	RTV	Black	-50	200	27	1.21	320	10	<36	0.20
AS1723	Alkoxy	Flowable	72000	RTV	Trans	-50	200	28	1.00	216	11	24	0.20
AS1726	Alkoxy	Flowable	3100	RTV	Trans	-62	200	36	1.52	141	10	24	0.20
AS1740	Alkoxy	Self Level	40000	RTV	Trans	-62	200	27	1.80	400	18	<72	0.18
AS1745G	Alkoxy	Paste		RTV	Grey	-62	316	35	7.75	830	45	<36	0.20
AS1745T	Alkoxy	Paste		RTV	Trans	-62	200	35	6.90	775	45	<36	0.20
AS2700	Alkoxy	Paste		RTV	Grey	-50	200	39	2.05	240	20	<1	0.30
AS2701	Alkoxy	Paste		RTV	Grey	-50	200	65	1.93	80	12	<1	1.55
AS1800	Acetone	Paste		RTV	White	-50	220	35	2.20	388	2	<24	0.20
AS1802	Acetone	Self Level	350000	RTV	Grey	-50	220	67	3.90	103	4	<8	2.30
AS1803	Acetone	Self Level	350000	RTV	White	-50	220	65	2.80	94	4	<8	1.55
AS1805	Acetone	Paste		RTV	Red	-50	300	50	1.70	270	4	8	0.20
AS1810	Acetone	Paste		RTV	Black	-50	220	35	1.81	353	4	<24	0.19
AS1820	Acetone	Flowable	30000	RTV	White	-50	220	30	1.10	330	6	16	0.20
AS1821	Acetone	Flowable	20000	RTV	Black	-50	220	27	0.85	200	10	<24	0.20
1-Part General Purpose Sealants													
AS5600	Oxime	Paste		RTV	Various	-50	180	28	1.12	530	7	<12	
AS5700	Alkoxy	Paste		RTV	White	-60	200	34	2.00	580	15	24	
AS5701	Alkoxy	Paste		RTV	Black	-60	260	37	2.40	450	10	24	
AS5702	Alkoxy	Paste		RTV	Trans	-60	200	24	2.70	540	15	24	
AS5720	Alkoxy	Self Level	80000	RTV	White	-60	200	20	1.50	450	25	24	
AS5721	Alkoxy	Self Level	100000	RTV	Black	-60	260	30	1.50	450	25	24	
AS5722	Alkoxy	Slumping Paste	220000	RTV	White	-60	200	25	1.52	450	25	24	

Silicone Greases

Product	Description	Properties	Application
SGM494	Silicone Grease	Water Potable,	Plastic / Rubber water fittings.
	High Performance	MOD approved XG250.	Aerospace lubricant, Mould release,
	Non-melting	Non-melting	Insulation and protection
SGM496	Silicone Grease	Excellent dielectric properties	Protection of high voltage insulators
	High voltage insulator		