gdpol

Custom silicone rubber solutions

Tubing & Cord Extrusions Mouldings Seals & Gaskets Custom Parts







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adpol



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Adpol is a family-run business, specialising in high performance silicone rubber products. Founded in 1974, we are one of a handful of UK-based companies with AS9100 Aerospace accreditation and ISO 9001 - and we pride ourselves on the quality of our products, service and customer care.

We manufacture a wide range of extrusions and mouldings at our Worthing factory. The amazing shape memory, elasticity, UV and ozone resistance of our silicone rubber products makes them outstanding weatherproof seals, able to withstand extreme temperatures from – 100°C to + 300°C. The colour matching capabilities of this unique material also give it huge design potential, making it the elastomer of choice in many food, drink and medical applications.

At Adpol we don't just believe in exceptional Customer Service, our thorough quality assurance programme ensures you receive the best possible products too. We offer certificates of conformity, first article inspection and full process traceability.



OUR SEALS AND GASKETS ARE USED IN:

- Aerospace and mass transit
- Food and drink products
- Medical equipment
- Electronics
- Oil, fuel and chemical resistant products
- Windows and doors

To name but a few...

OUR PRODUCTS INCLUDE:

Rubber compounds **v**



Our in-house colour-matching facilities where we can mix custom compounds - keep costs down, speed things up and create a truly bespoke product.

Rubber extrusions **v**



We can manufacture custom profiles to your individual designs, including reverse engineering. We also supply samples to help you decide what shape and hardness you need. Take a look at the back page to see the types of extrusions we can produce.

Joined ring or picture frame gaskets **v**



Our dedicated team specialise in creating joined gaskets. We use a range of specialist colour matched adhesives to achieve a strong, invisible join. We can also produce moulded corner sections for maximum strength.

Rubber mouldings 🔻



Adpol's dedicated moulding division has many years' experience of compression and transfer moulding to bespoke requirements in all grades of silicone rubber, plus other compounds such as Neoprene, EPDM and Butyl.

Stamped or waterjet cut gaskets **v**



Using a wide range of rubber and sponge sheeting, Adpol can provide bespoke flat gaskets for your new designs, or to replace obsolete parts. Any of our specialist range of silicone compounds can be used along with Neoprene, EDPM, Nitrile, natural rubber and other sponges.

Tubing and cord **v**



Adpol manufactures tubing and cord in most sizes, wall thickness and grades of silicone, Neoprene and Viton (sizes range from 0.3mm – 75mm ID and 0.2mm – 25mm wall thickness)

Silicone rubber sheet **v**



We can supply silicone rubber sheeting, in specialist grades and colours, from 0.5mm to 10mm thick. A range of general-purpose silicone grades are also available in 1.2m wide rolls, with or without adhesive backing.

Silicone sponge extrusions **v**



Adpol offers silicone sponge extrusions and sheets in a range of densities and colours. Tube, solid cord and hollow profiles can all be produced, along with sheeting up to 40mm thick.

Adpol Silicone Rubber Grades

Compound type	Key features	Typical applications	Hardness range	Certification	Temperature °C
General Purpose AP301 & 402	All the standard excellent compression set, shape memory, UV & weather resistance, finish and stretch.	Used for the vast majority of tube, strip, cord and extrusion jobs where high quality and good value are needed.	20 - 90 Shore A	USP CLASS VI FDA WRC & WRAS UL94HB	-60 to +200
High Tear Strength AP202	All the above plus greatly improved resistance to tearing and abrasion.	Used where a stronger rubber is needed. Door seals, conveyors, vibration pads and inflatable seals.	20 - 90 Shore A	FDA WRC & WRAS UL94HB	-60 to +200
High Temperature and High Tear Strength AP201	All of the above with improved top temperature limit up to 250°C.	Used in the above applications but with added resistance for high temperatures.	20 - 90 Shore A		-60 to +250
Extreme Low Temperature AP701/6	Minimum operating temperature of -100°C.	Used for freezer or cryogenic seals and applications where extreme low temperatures are encountered.	60 Shore A		-100 to +200
Extreme High Temperature AP701/5	Maximum operating temperature of +300°C.	Used for oven and autoclave seals and applications where regular resistance to high temperatures are needed.	40 - 70 Shore A	FDA, BFR, Journal Official, Food Approval	-80 to +300
High Temperature AP702/5	Maximum operating temperature of +250°C.	Used in oven and high temperature applications where greater flexibility in hardness and colour is required.	20 - 90 Shore A		-60 to +250
Platinum Cure AP901	The cleanest cure for improved clarity, surface finish and tear resistance.	Base compounds are medical grades and this compound is a popular choice in the medical, food & drink sector.	30 - 80 Shore A	USP CLASS VI FDA, WRC, WRAS	-60 +200
Steam Resistant AP701/18	Engineered to resist steam attack, which can degrade Silicone Rubber.	Ideal for seals for sterilisers, autoclaves & pressurised medical cleaners.	60 Shore A	European Food Approval (BFR)	-60 +200
Carbon Loaded Semi Conductive AP701/2	Engineered to provide conductivity and flexibility.	Used in anti static or EMI shielding applications in a wide range of industries.	50 - 70 Shore A	UL94HB	-40 to +200
Metal Loaded AP702/2	Engineered to be picked up by metal detectors on production lines.	Increasingly used in the food and drink industry to replace existing rubber parts.	40 - 90 Shore A	FDA	-30 to +180
Fluorosilicone AP501	Specialist flexible grade with acid, chemical & alkaline fuel & grease resistance.	Used in applications where seals need resistance to extreme and corrosive substances, where other rubbers will not last.	20 - 80 Shore A		-65 to +250
Viton & FKM	Specialist tough grade with fuel & oil resistance.	Used in applications where seals need extreme resistance to oils & fuels.	60 - 80 Shore A		-40 to +200
Neoprene & Chloroprene	Tough grade with weather and some fuel & oil resistance.	Used as tube or cord in applications where abrasion & tear resistance is important.	43 - 80 Shore A	BS 3858 Tla/G198 T1	-30 to plus 120
Flame Retardant & Low Smoke/ Toxicity AP704	Self extinguishing grade with low smoke and toxicity performance.	Specialist grade developed for the Aerospace, rail & mass transit industries where rubber needs to meet fire or toxicity standards.	40 - 70 Shore A	UL94 V0 ABD0031, BS6853 FAR/ JAR25.83 AFNOR NF F 16.101	
Silicone Sponge AP601	Expanded Silicone rubber sponge for compression seals.	Supplied as sheet, punched gaskets or extruded profiles in a range of colours and densities.	10lb/ft - 33Lb/ft	FDA, Flame Retardant	-50 to +250

All figures are typical and only an average if a range of hardnesses or grades are quoted.

This is by no means an extensive list. We specialise in developing custom grades to give you exactly what you need, so if you can't see what you need just ask.

Extrusion Profile Examples

Adpol can produce extrusions for a wide variety of applications and will be pleased to quote for requirements to sketch/drawing details or existing sample to match. New tooling and samples typically takes 2-3 weeks

The examples below are by no means an exhaustive list, merely a sample of some of the profiles Adpol can produce. If you cannot find what you require please give us a ring and we will do our best to meet your requirements.





Cord

Tubing 0.3mm - 75mm inner diameter 0.2mm - 25mm wall thickness



Triangular Section 6.4mm - 50mm height 6.4mm - 50mm base



'P' Tape 3.5mm OD - 33mm OD (bulb)



'D' Section 6mm - 50mm base 6mm - 25mm height Solid 'D' sections also available

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Channel Tube

0.2mm - 50mm diameter

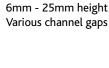
4mm - 20mm tube section Various channel dimensions from 1mm - 6mm gap



'U' Channel 0.5mm - 30mm (slot) Various heights & widths



'H' Section Various channel gaps From 12mm overall height Various widths



'e' Section

10mm - 50mm base

Keyhole Section

3mm - 40mm height

6mm - 20mm base

Flap Seal

From 1mm - 6mm channel gap

Various flap dimensions



Double 'P'

Various widths to 50mm wide

Vulcanised/Moulded Corners

Corners with the best strength and appearance combination



Autoclave Seal

6mm - 40mm height 6mm - 20mm base



Omega Tube Section

4mm - 20mm tube section Various 'T' section base dimensions



'L' Section

1mm x 1mm to 10mm x 10mm section Various height & base dimensions



Custom Design

3.5mm dia bulbs to 12mm dia bulbs Custom channel seals are one of thousands available



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