



SPECIALISTS FOR MEDIA AND TEMPERATURE

REHAU silicon hoses





SILICON

The solution for extreme situations

RAU-SIK is a polymer substance with excellent physical properties that are tough to beat, especially in extreme situations.

The advantages of RAU-SIK include:

- Long-term temperature resistance in dry heat of +200 °C (up to +300 °C with special additives/up to +315 °C for brief periods)
- Flexible at low temperatures up to –60 °C (up to –90 °C with special additives)
- Elasticity retained across the entire range of temperatures
- Excellent shape retention
- Ageing, weather, ozone and UV-resistant
- Odour and taste-neutral
- Water-repellent (hydrophobic)
- Elasticity retained in high and low temperatures
- Electrically insulated and sterilisable
- Resistant to many chemicals
- No additional plasticisers in the formulation, so there is no disruptive plasticiser migration
- Transparent customisation is a snap
- Steam-resistant up to approx. 2 bar

Special formulations:

- Electrically, thermally conductive
- Flame-retardant, hardly inflammable
- Smoke-resistant
- With a coarse surface
- Oil-, solvent- and fuel-resistant (fluoro silicone)
- Extra evaporation-resistant
- High tear propagation resistance
- For applications in the food sector
- Potable water quality according to the German regulations for drinking water pipes A (KTW A) / German Gas and Water Association (DVGW) 270
- Fire-proof for rails
- Certified for aviation use according to DAN 1106 and DAN 1107

A summary of our material qualities and their properties can be found in Material Data Sheet AV0180.



REHAU SILICON HOSES

The industry specialists

The specialised hose solutions from REHAU offer functionality, safety, ease of use and compliance with international standards in a wide variety of industries.

A broad range of talc-coated and non-talc-coated hose products made of RAU-SIK are offered under the brand names RAUSIL and RAULAB. REHAU is both a reliable vendor for standard programs and a partner for customised offerings for a wide variety of silicon applications.

We can develop new formulations, cross cuts and modified surfaces specially tailored to your application and provide colours customised precisely to your needs.

Fabrications are a snap as well: The hoses can be supplied in fixed lengths, affixed to rings or imprinted. Comprehensive consulting related to application engineering is also part of our service.

You can count on our experience: We have been formulating and fabricating silicon into highly functional solutions for more than 60 years.

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RAUSIL / RAULAB

Silicon hoses (RAU-SIK)

	RAUSIL talc-coated		RAULAB non-talc-coated	
	Smoother surface, makes it easier to attach the hose, trim it etc.		Good transparency, improved control of flowing mediums	
	RAUSIL	RAUSIL FG (food grade)	RAULAB	RAULAB FG (food grade)
Applications	Technical applications	Food sector Meets Recommendation XV by the German Federal Institute for Risk Evaluation regarding silicone and/or FDA §177.2600, Directive (EC) 1935/2004	Technical applications	Food sector Meets recommendation XV by the German Federal Institute for Risk Evaluation regarding silicone and/or FDA §177.2600, Directive (EC) 1935/2004
Qualities	Shore A 22 - 80	Shore A 22 - 80	Shore A 22 - 80	Shore A 22 - 80
Dimensions	From 0.2 to approx. 70 mm inner diameter	From 0.2 to approx. 70 mm inner diameter	From 0.2 to approx. 70 mm inner diameter	From 0.2 to approx. 70 mm inner diameter
Standard range (can be delivered ex-works)				Dimensions see page 8 Material: RAU-SIK 8130 Shore A 60 +/- 5 Colour: Transparent, 20900

RAULAB FG SLIDETEC

Silicon hoses non-talc-coated – standard range

Suitable for applications in the food sector. Meets the requirements of the German Federal Institute for Risk Evaluation, XV "Silicone", FDA § 177.2600, Directive (EC) 1935/2004.

Material:

RAU-SIK 8130
60 ± 5 Shore according to DIN 53505

Temperature resistance:

-60 °C to +200 °C

Packaging:

Coils in PE bag, 100 m per box

Colour:

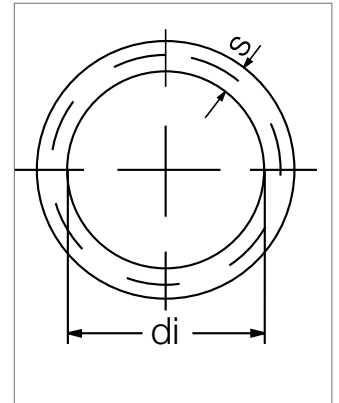
Transparent, 20900

Delivery time:

This item can be delivered ex-works immediately.

Note:

Please store hoses separately from rubber items!
Our technical delivery terms and conditions (685/109) apply. We would be happy to provide you with a copy.



Mat. no.	di/s [mm]	Coil length [m]	Packaging unit [m]
18177011100	1/1	25	100
18177021100	2/1	25	100
18177031100	2/2	25	100
18177041100	3/1	25	100
18177051100	3/1.5	25	100
18177061100	3/2	25	100
18177071100	4/1	25	100
18177081100	4/1.5	25	100
18177091100	4/2	25	100
18177111100	5/1	25	100
18177121100	5/1.5	25	100
18177291100	5/2	25	100
18177311100	6/1	25	100
18177131100	6/1.5	25	100
18177141100	6/2	25	100
18177151100	7/1.5	25	100
18177391100	7/3	25	100
18177161100	8/1	25	100
18177171100	8/2	25	100
18177181100	8/3	25	100
18177191100	9/2	25	100
18177321100	10/1	25	100
18177211100	10/2	25	100
18177221100	10/2.5	25	100
18177451100	10/3	25	100
18177231100	12/2	25	100
18177241100	12/3	25	100
18177251100	15/3	25	100
18177361100	16/3	25	100
18177371100	20/3	25	50
18177381100	25/3	25	50

Tolerances

Inner diameter	
0.3 – 1.0 mm	± 0.1 mm
1.1 – 5.0 mm	± 0.2 mm
5.1 – 8.0 mm	± 0.3 mm
8.1 – 12.0 mm	± 0.4 mm
12.1 – 16.0 mm	± 0.5 mm
16.1 – 22.0 mm	± 0.6 mm
22.1 – 30.0 mm	± 1.0 mm
Wall thickness	
0.3 – 0.7 mm	± 0.1 mm
0.8 – 2.0 mm	± 0.2 mm
2.1 – 4.0 mm	± 0.3 mm
4.1 – 8.0 mm	± 0.4 mm

RAUSIL / RAULAB

Special solutions



Hoses for milking machines

- Flexible and good elasticity, even at low temperatures
- Long service life, long working life, low retooling costs
- Ageing, ozone and UV-resistant
- No embrittlement

For further information, please see Technical Information File no. 18G700.



Hoses for the beverage industry

- Odour and taste-neutral
- Special platinum-silicon material



RAUQUA SIK drinking water hoses

- Tested in accordance with the German regulations for drinking water pipes, category A and the German Gas and Water Association's work sheet W 270

For further information, please see Technical Information File no. DSH00024.



Hoses for the food industry

- Anti-microbial silicon formulations with silver compounds



Insulation hoses

- Suitable for cable harnesses in the automotive industry with prototype approvals, e.g., from VW or with IMDS listing.
- Suitable for medium-voltage systems (large hoses)
- Suitable for lights
- Suitable for electrical wires and cords (small hoses)

For further information, please see Product Range File no. 15F200.

RAUSIL / RAULAB

Special solutions

Protective sleeving

- Suitable for dental equipment, optical fibres and lights



Hoses for toys

- Non-toxic
- Saliva-resistant



Composite tubing

- Silicon with thermoplastic
- Combination of chemical resistance, flexibility and avoidance of permeability for silicon



Aviation and rail tubing

- OEM-approved formulations with excellent fire behaviour
- For further information, please see Prospectus File no. IND716.



Hoses for the pharmaceutical and medical sectors

- Formulations and raw materials in accordance with USP class VI (applications on and in the body are not permitted!)



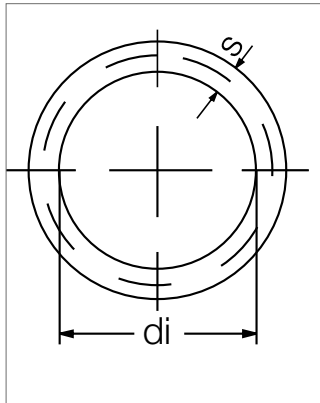
Hoses for electrical engineering

- Special formulations to transmit signals (electrically conductive)



RAUSILAM FG

Silicone hoses with reinforcement



RAUSILAM FG hoses offer a special combination of pressure resistance and excellent material properties, including heat resistance and buckling behaviour. Suitable for applications in the food sector. Meets the requirements of the German Federal Institute for Risk Evaluation, XV "Silicone", FDA § 177.2600, Directive (EC) 1935/2004.

Material (inner layer and outer layer)

RAU-SIK 8763
 75 ± 5 Shore A according DIN 53505
 Reinforcement: Polyester monofilament
 Not talc-coated, talc-coated upon request

Temperature resistance:

-60 °C to +130 °C

Colour:

Inner layer:
 Transparent, 20900
 Outer layer options:
 Red, 15949
 Blue, 17946
 Yellow, 13907

Delivery time:

This item can be delivered upon request:

Note:

Rubber items available separately.
 Hose nozzles must not have sharp edges or barbs.
 Smaller coils of at least 10 m are available. Our technical delivery terms and conditions (686/25), as amended, apply.

For more complex requirements, we can develop products tailored to your special application:

- Hoses up to +200 °C (aramid)
- Hoses up to +300 °C
- Hoses in other dimensions
- Hoses with other pressure values using different reinforcement methods

Technical note:

The indicated burst pressures are benchmarks. The burst pressure is approx. 20% lower for polyester filament.

In practical applications (operating pressure), 3- to 4-fold stability with respect to the specified burst pressure (based on DIN 20024) can be assumed. Hoses made with PES filament have greater flexibility than those made with PES monofil.

Dimension	Reinforcement		Tolerances		Burst pressure (bar)	Bending radius
	Polyester monofilament	Polyester filament	mm		Typical values	mm
di/s mm	Mat. no.*	Mat. no.*	di	s	Polyester filament at 20°C	(benchmark)
3 / 2.5	1807053	1807078	+/- 0.3	+/- 0.3	50	15
4 / 2.5	1807083	1807088	+/- 0.3	+/- 0.3	70	15
5 / 3	1807093	1807058	+/- 0.3	+/- 0.3	65	17
6 / 3	1807003	1807008	+/- 0.3	+/- 0.3	62	17
8 / 3.2	1807043	1807018	+/- 0.4	+/- 0.3	45	18
9.5 / 3.7	1807013	1807028	+/- 0.4	+/- 0.3	60	35
12.5 / 4	1807023	1807038	+/- 0.5	+/- 0.3	42	45
16 / 4.5	1807103	1807098	+/- 0.5	+/- 0.4	30	55
19 / 5.8	1807033	1807048	+/- 0.6	+/- 0.4	25	55
25 / 6		1807368	+/- 0.9	+/- 0.5	22	10

* Please enquire about the appropriate version no. from the REHAU Sales Office.

RAUSILAM FG

Silicon hoses with reinforcement – standard range

Suitable for applications in the food sector. Meets the requirements of the German Federal Institute for Risk Evaluation, XV "Silicone", FDA § 177.2600, Directive (EC) 1935/2004.

Material:

Inner layer and outer layer:
RAU-SIK 8763
75 ± 5 Shore A according DIN 53505
Reinforcement: Polyester filament
Without talc

Temperature resistance:

–60 °C to +130 °C

Packaging:

4 x 25 m coils in boxes; for pack contents, see table.

Colour:

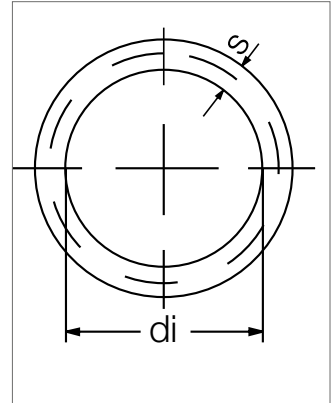
Inner layer:
Transparent, 20900
Outer layer:
Red, 15949

Delivery time:

This item can be delivered ex-works immediately.

Note:

Rubber items available separately.
Hose nozzles must not have sharp edges or barbs.
Our technical delivery terms and conditions (686/25), as amended, apply.



Mat. no.	di/s [mm]	Coil length [m]	Packaging unit [m]
18070081100	6/3	25	100
18070181100	8/3.2	25	100
18070281100	9.5/3.7	25	100
18070381100	12.5/4	25	100

Tolerances

Inner diameter	
0.3 - 1.0 mm	± 0.1 mm
1.1 - 5.0 mm	± 0.2 mm
5.1 - 8.0 mm	± 0.3 mm
8.1 - 12.0 mm	± 0.4 mm
12.1 - 16.0 mm	± 0.5 mm
16.1 - 22.0 mm	± 0.6 mm
22.1 - 30.0 mm	± 1.0 mm

Wall thickness	
0.3 - 0.7 mm	± 0.1 mm
0.8 - 2.0 mm	± 0.2 mm
2.1 - 4.0 mm	± 0.3 mm
4.1 - 8.0 mm	± 0.4 mm

RAUSILAM FG

Special solutions



Hybrid hoses

- Special reinforcement with closed mesh made of different types of thread and special bonding with the silicone inner hose
- Meets high requirements for pressure resistance
- Heat resistant
- Flexible
- Resistant to deformation in 3D installations
- Suitable for use in appliances such as coffee dispensers



Thin-walled hoses

- Special economical option for applications with low requirements for pressure resistance



Hoses for resin transfer moulding process

- Heat and pressure resistant
- No impurities / migration in the resin

For further information, please see Product Information File no. 19F00.

FOAMED SILICONE HOSES

Program portfolio

REHAU produces RAU-SIK hoses with foamed finishes with inner diameters of 5 to 45 mm and wall thicknesses of 3 to 12 mm. These special hoses are suitable for insulation, thermal insulation, as roller covers and as a sealant.

SO WE CAN STAY IN TOUCH

Let's talk

Do you need further information or do you have questions about our offer? There are many different ways to get in touch with us:

Sales Office

Our staff at the REHAU Sales Office looks forward to providing you with information and advice. To find a location near you, please click on the following link.

Internet

Of course, you can find our broad product portfolio online as well. You can also gain an overview of our comprehensive range of services.

Visit us at: www.rehau.com

Do you want to get the latest news from the world of unlimited polymer solutions?

Then visit our Facebook page!

www.facebook.com/rehaugroup

We're never far away. For locations, visit

www.rehau.com/locations

Please send any enquiries to the following email address:

hose-solutions@rehau.com.

The customer portal

The REHAU customer portal offers a number of features that can be used 365 days a year, 24 hours a day.

In the password-protected section of the website you can submit orders using our order management system, which lets you select items, submit direct orders and even upload orders from your own inventory management system. You can also check the status of your orders. The specific price information can also be easily formatted as a price list and printed. You will find data sheets and downloads in the information section.

You can access the customer portal directly from the toolbox on the REHAU website.

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Our verbal and written advice relating to technical applications is based on experience and is to the best of our knowledge correct but is given without obligation. The use of REHAU products in conditions that are beyond our control or for applications other than those specified releases us from any obligation in regard to claims made in respect of the products. We recommend that the suitability of any REHAU product for the intended application should be checked. Utilization and processing of our products are beyond our control and are therefore exclusively your responsibility. In the event that a liability is nevertheless considered, any compensation will be limited to the value of the goods supplied by us and used by you. Our warranty assumes consistent quality of our products in accordance with our specification and in accordance with our general conditions of sale.

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