

RAKU-PUR Foam gaskets – Chemical resistance

- + Applicable
- 0 Suitable to only a limited extent (Lightly swelling and softening of the gasket respectively)
- Not recommended (Strong loss of mechanical properties)
- +/- Applicability strongly depending on the specific substance or concentration

The benchmarking was done after a residence time of 7 days. Appraisal criterion was the swelling, as well as the change of hardness compared to the initial state.

Please notice, that the results depend on the residence time, temperature and concentration of the test substance. The tests were done with the named substances as pure medium. Preparation and mixtures of the substances can also lead to different results. In principle RAKU-PUR gaskets are resistant against droplets or small splashes of almost every substance. The occurring changes of the properties of the gasket in organic solvents are mostly reversible by evaporation of the solvents. On the other side, damages caused by strong acids or bases are irreversible.

The list for the chemical resistance of RAKU-PUR foam gaskets is intended for the use as orientation guide. It is in no case an obliging promise of properties. To be able to make a concrete conclusion of the applicability in the case of use, a test under real terms of use has to be done. If necessary, our Laboratory Foam-Gaskets can give assistance.

Grease and oil:

Distilled oils and its emulsions	+
Epoxided oils	+
Linseed oil	0
Mineral oil and derivates	+/-
Paraffin wax and derivates	+
Vegetable and animal greases and oils	+0
Castor oil	+
Fatty acid esters	+

Aqueous solutions:

Urea, aqueous	+
Slight basic and acid solutions	+
Salt water	+
Drinking water	+
Calcium chloride, aqueous	+
Chlorine water	+/-

Alcohols und glycols:

Butane diol	+
Butanol	-
Butylene glycol	+
Diethylene glycol	+
Dodecyl alcohol	+
Ethylene glycol	0
Glycerin	+
Methanol	+/-
Ethyl alcohol	-
Glykols	0
Polyols	+
Propyl alcohol	+/-

Solvents, hydrocarbons:

Acetone	-
Aliphatic hydrocarbons	0
Petrol	-
Butyl acetate	0
Chlorobenzene	-
Chloroform	-
Chlorinated hydrocarbons	-
Cyclohexanone	-
Decalin, Decahydronaphthalene	0
Diesel fuel	0
Diethyl ether	+/-
Dimethyl formamide, DMF	-
Ethyl acetate	-
Ether	+/-
Heptane	+
Hexane	+
Methyl acetate	-
MEK, methyl ethyl ketone	-
Methylene chloride	-
Methyl isobutyl ketone	-
Petrol ether	+/-
Perchlorethylene	-
Solvent – naphta	+/-
Styrol	-
Petroleum spirit	+/-
Terpentine	+/-
Carbon tetrachloride	-
Tetrahydrofuran	-
Tetralin	+
Toluene	-
Trichlorethylene (Tri)	-
Vaseline	+
Xylene	-

Detergents and emulsifiers:

Emulsifiers and tensides based on fatty alcohols	+
Epoxidized fatty alcohols	+
Lauryl sulfate	+
Lecithin	+
Soap and wash-active substances	+

Plastics and its solutions:

Acrylates	+
Alkyd resins	+
Epoxide esters	+
Epoxy resins	+
Saturated and unsaturated polyester resins	+
Urea-formaldehyde resins (with butanol)	-
Resin dispersions, slightly basic and acid	+
Bone glue	+
Solutions of alkyd resins	0
Melamine formaldehyde resin, alcoholic solutions	+
Natural rubber latex	+
Polyamide resins	+
Polyurethane resins	+
Solutions of silicone resins in alcohols	0
Synthetic latex	+

Colours and paints:

Paints based on alcohol soluble binders	-
Paints based on modified oils and resins (with hydrocarbons)	0
Latex dispersions	+
Painter colours	+
Coating colours and paints (do-it-yourself)	-
Ink based on oil and phthalic acid resin	+

Carboxylic acid esters and plasticizers:

Adipic acid esters	+
Dibutylphthalate	+/-
Phosphoric acid esters	+
Phthalic acid esters	+
Sulphonic acid esters	+
Plasticizers for plastics	+

Acids and bases:

Formic acid	-
Ammonia	+/-
Benzoic acid	+
Boric acid	+
Chromic acid	-

Acids and bases:

Acetic acid	+/-
Conc. sulphuric acid	-
Potassic- and sodium hydroxide	-
Nitric acid, 10 %	-
Hydrochloric acid, 10 %	0
Citric acid	+

Salts:

Ammonium hydroxide	+
Aluminium nitrate	+
Ammonium chloride	+
Ammonium fluoride	+
Ammonium sulphide	+
Barium carbonate	+
Barium chloride	+
Barium hydroxide	+
Barium sulphate	+
Lead nitrate	+
Calcium carbonate	+
Potassic salts	+
Table salt	+
Magnesium salts	+

Gases:

Emissions (containing carbon monoxide)	+
Acetylen	+
Argon	+
Natural gas	+
Helium	+
Carbon dioxide	+
Laughing gas	+
Methane	+
Ozone	0
Nitrogen	+
Hydrogen	+
Xenon	+

Miscellaneous:

Brake fluid	-
Mercury	+
Sweat	+
Urine	+

Date of issue: 11/2005

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