



Polyamide 12 Conduits Properties and Resistance

REIKU-conduits made of Polyamide 12 are compliant with

- REACH (**R**egistration, **E**valuation, **A**uthorisation of **C**hemicals)
- RoHS (**R**estriction of the use of certain **H**azardous **S**ubstances in electrical and electronic equipment)
- PWIS-free (free from **P**aint **W**etting **I**mpairment **S**ubstances)
- PAH-free (free from **P**oly-**A**romatic **H**ydrocarbons)
- PFOS-free (free from **P**er **F**luor **O**ctan **S**ulfat)

Currently defined properties of Polyamide 12 conduits

- Heating value >7-10 kWh/kg
- UL94 V-2
- UV-resistance by black coloured articles. Acc. to ASTM D 2565 after 2000 hours no alterations concerning optic and mechanic. Regarding extremely high UV irradiation the resistance is untested.
- Electric strength 27 kV/mm
- Volume resistivity 10^{13} Ohm*cm
- Oxygen index acc. to DIN EN ISO 4589-2:2006 >28% (HL3)
- Smoke Gas index acc. to EN ISO 5659-2 <300 (HL3)
- Toxicity acc. to NF X70-100:2001 is 0,36 (HL4)

Currently tested resistance of Polyamide 12 conduits to

• Acetone	• Hydropropyl-Methacrylate
• Ammonia	• Kerosene up to 85°C
• Aromatic epoxy resin acrylate	• Minerale oil
• arsenic acid, aqueous	• Monoalkyl, -aryl, -alkylaryl
• Beer	• Nitrol
• Benzine	• Ozone (conditionally permanent)
• Benzol	• Paraffin (waxy compound)
• Borax, aqueous	• Petroleum
• Butane, gaseous	• Propane, liquid
• Calcium chloride, aqueous	• Silica, aqueous
• caustic potash solution, aqueous	• soap solution
• Carbon disulphide	• 15% Sodium nitrat solution
• potassium Cyanide, aqueous	• Sodium chloride
• Diesel oil	• Spark Erosion Liquid
• Dodecyl Methacrylate	• Starch, white
• Ester oils up to 60°C	• Stearic acid
• Ethyl ether	• Styrol
• Ethylacetate	• Tallow
• Fruit juice	• Toluol
• Glycol	• Turpentine
• Glucose, aqueous	• Transformer oil
• Glycerine, aqueous	• Trimethylpropane Trimethylacrylate
• Heating oil	• Urine
• Hydraulic oil	• Vinegar and acetic acid, aqueous
• Hydrogen	• Washing / cleaning agent, diluted
• Hydrogen peroxide	• Xylol



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• Hydrogen sulphide	•
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PA12 conduits are resistant to the following oils and fats

- Mineral Oils without additives at 20°C
- ASTM-Oil No.1, 20°C
- ASTM-Oil No.2, 20°C
- ASTM-Oil No.3, 20°C
- Animal oils
- Herbal oils
- Transformator oils (Pyranole)
- Silicone-based
- Diesel oil
- Heating oil
- Hydraulic oils based on
 - Mineral oil
 - Glycol (Polyalcyglycol)
 - Phosphate ester
 - Bore oil
 - Cutting oil

PA12 conduits are not resistant to

- Formic acid, aqueous
- Bromine
- Methacrylic acid
- Methylene chloride (dichlormethane)
- Phosphoric acid, aqueous
- Rape oil methyl ester (RME) at longer application
- Nitric acid, hydrochloric acid, aqueous
- Sulphuric acid, aqueous, steam
- Tartaric acid, aqueous

Other

- No food grade
- Flame retardant are free from halogen and phosphor
- No radioactive substances contained
- Free from critical substances like Antimony oxide, Arsenic and its compounds, Azo compounds with cancerous amine components, Lead and its compounds, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE), Cadmium and its compounds, Chlorinated Hydrocarbons, Chlorinated paraffine, Chrome (VI)-compounds, Dibutylphthalat (DBP), Bis(2-ethylhexyl)phthalat (Diethylhexylphthalat, DEHP), Dimethylformamid (DMF), HCFC (CFC-substitute), artificial, cancerous mineral fibres, Mercury and its compounds, Selenium and its compounds, Beryllium and its compounds, Sulphur hexafluoride (SF₆); Details except insignificant amounts acc. to natural and technical contaminations.

All technical information are without warranty. This information serves as a guideline only and is accurate to the best of our knowledge. REIKU accepts no responsibility of improper use of a particular product and the occurring damage. Suitability of product for special application must be checked and tested by the user him/herself.