

Material properties REIKU®-Tubings

Material/type	BN	Version	Application	Reversed bending strength	Compression strength	
Polyamide 6 (PA 6) PA R N ...	BN 22621 – BN 22622	Standard version medium quality	Machine, apparatus and vehicle construction ¹⁾	good	125 N/50 mm	
Polyamide 6 (PA 6) PA R E ...	BN 22623 – BN 22624	Simple version light quality	Machine, apparatus and vehicle construction ¹⁾	good	125 N/50 mm	
Polyamide 12 (PA 12) PA R A B ...	BN 22633	Highly flexible version light quality	Suitable for robots dynamic burden	excellent	125 N/50 mm	
Polyamide 12 (PA 12) PA R R ...	BN 22630 – BN 22631	Highly flexible version, medium quality, «robot tubings»	Suitable for robots dynamic burden	very good	125 N/50 mm	
Polyamide 12 (PA 12) PA A B B ...	BN 22319	Train, flexible quality	Railway, mass transportation, static	very good	Compressive property class 1 according to EN 61386-1	
Polyester Ester (TPE) TP R I B ...	BN 22627	Highly flexible medium quality	Vehicle construction industrial plant, insulation	good – very good	< 125 N/50 mm	
Thermopl. Polyurethane (TPU) PU R R B ...	BN 22635	Highly flexible version, medium quality, «robot tubings»	Suitable for robots, especially on strong dynamic burden ¹⁾	very good	< 125 N/50 mm	
Polyamide 6 PA R T B	BN 22638	Two parts and closable, flexible	Switch cupboard, construction devices	good	–	
Polypropylene PP R T B	BN 22639	Two parts and closable, flexible	Switch cupboard, construction devices	satisfactory	–	

¹⁾ USA Export, UL recognized File E 168970 (M) 105 °C

In order to maintain the polyamide tubings properties of material, storage under following conditions is recommended:
storage temperature: +20 °C ± 5 °C, humidity: 55 to 75 %.

Impact strength	Temperature range	Flame Class DIN EN 61 386-1	Resistance to	color
6 joule @ -18 °C > 20 joule @ RT	-40 °C to +105 °C +150 °C short term	Halogen-free, self-extinguishing, non-flame spreading	Alcohol, grease, mineral oils, petrol, diesel oil	black grey
2 joule @ -18 °C > 15 joule @ RT	-40 °C to +105 °C +150 °C short term	Halogen-free, self-extinguishing, non-flame spreading	Alcohol, grease, mineral oils, petrol, diesel oil	black grey
4 joule @ -18 °C > 4 joule @ RT	dyn. -5 °C to +85 °C stat. -40 °C to +105 °C	Halogen-free, self-extinguishing, non-flame spreading	Alcohol, grease, mineral oils, petrol, diesel oil	black
5 joule @ -18 °C > 5 joule @ RT	dyn. -30 °C to +85 °C stat. -50 °C to +140 °C +150 °C short term	Halogen-free, self-extinguishing, non-flame spreading	Alcohol, grease, mineral oils, petrol, diesel oil	black grey
Class 3-4 according to EN 61386-1	-30 °C to +105 °C +150 °C short term	R22, HL2 indoor, R23 HL3 outdoor, DIN EN 45545-2, V-0, UL94	Alcohol, fats, mineraloils, diesel, fuel, weather, UV-rays	black
3 joule	-50 °C to +160 °C +180 °C short term	Halogen-free	Acid and alkaline, oils, hydraulic oils	black
8 joule	dyn. -20 °C to +90 °C stat. -30 °C to +90 °C	Halogen-free	Acid and alkaline, oils, hydraulic oils	black
-	-40 °C to +120 °C +150 °C short term	Low halogen, self-extinguishing, non-flame spreading	Alcohol, grease, mineral oils, petrol, diesel oil	black
-	-40 °C to +135 °C +150 °C short term	Low halogen, self-extinguishing, non-flame spreading	Alcohol, grease, mineral oils, petrol, diesel oil	black

All mentioned values are valid at 20 °C and 50 % relative humidity (laboratory conditions) for tubings from nominal size 17F onwards.
The above-mentioned corrugated tubings are UV-resistant. Special production as to color, version and dimension is possible on agreement.
(Source: Reiku GmbH)