

MATERIAL NAME	Polyvinyl chloride	Polyurethane Rubber	Nature-Rubber	Styreen Butadiene Rubber
MATERIAL GROUP OF THE HOSE INNER LAYER	PVC	PUR	NR	SBR
Max. Temperature range °C				
- dry air	+60°C	+80°C	+70°C	+70°C
- Hot oil	--	+60°C	---	---
- Hot water	+60°C	+40°C	+70°C	+80°C
Minim. Temperature range °C	-10°C	-20°C	-40°C	-30°C
General resistance to:				
- mineral oils and fats	moderate	well	low	low
- animal and vegetable oils and fats	moderate	well	low/moderate	low/moderate
- Acids diluted	well	moderate	moderate/good	moderate/good
- concentrated	low/moderate	low	moderate/good	moderate/good
- Solvents				
Alifate, gasoline, etc.	low	moderate/good	low	low
aromatics; toluene, benzene, etc.	low	low	low	low
esters, ether, alcohol	low	low	well	well
chlorinated; Tetra, Tri, etc.	low	low	low	low
- Water absorption	well	very well	very well	good/very good
- Sunlight + Ozone	low/good	very well	low	low/moderate
Elasticity	well	well	excellent	well
Dimensional stability	low	moderate	well	well
Wear resistance	well	excellent	excellent	very well
Permeability	low	quite small	quite small	quite small
Electrical Insulation	well	well	good/very good	good/very good
Hardness range (Shore A)	60 - 85	50 A - 75 D	30 - 90	40 - 90
Flame resistance	bad	bad	low	low
Tensile strength	20 - 30 Mpa	20 - 30 Mpa	18 - 30 Mpa	15 - 25 Mpa
specific characteristics	Resistant to chemicals, light in weight, colourfast, food safe (option) physiologically harmless	elastic, high mechanical strength, wear resistant, ozone and oxidation resistant. Oil and petrol resistant, gastight and notch-tough, chemical permanent	elastic, cold resistant, wear resistant, Acids with low concentration. Water and Alcohol with low temperature	oil-containing air, Water, industrial water, Glycol
thermal attributes	-35°C / +70°C	-30°C / +90°C	-60°C / +80°C	-50°C / +100°C

Ethylene Propylene Rubber	Acrilonitrile buta- diene Rubber (nitriles)	Chloroprene Rubber (neoprene)	Silicones Rubber	networked Polyethylene
EPDM	NBR	CR	SI (Q)	UPE / XLPE
+120°C --- +140°C	+90°C +120°C +90°C	+90°C +60°C +70°C	+180°C --- +100°C	+66°C +60°C +66°C
-50°C	-20°C	-30°C	-60°C	-50°C
low	excellent	well	moderate	good up to 60°C
well excellent well	excellent well moderate/good	well excellent well	moderate excellent moderate	well excellent excellent
low low excellent moderate/low excellent awarded	excellent well bad moderate well moderate	moderate/good moderate moderate/low low well excellent	low low moderate low excellent excellent	well well excellent well very well well
moderate/good	moderate/good	moderate/good	well	well
well	well	well	moderate	low
well	well	very well	low	moderate
quite small	low	low	quite small	low
excellent	bad	moderate/good	excellent	well
40 - 90	40 - 95	40 - 95	40 - 85	-----
low	low	well	moderate	bad
10 - 20 Mpa	15 - 20 Mpa	15 - 20 Mpa	10 - 20 Mpa	30 - 35 Mpa
Heat resistant, Steam resistant, Ozone Ageing and UV-resistant, Chemicals- permanent	petroleum products, Greases and fuels inorganic Acids at low. concentration and Temperature	Resistant to chemicals, ageing-, Ozone and Weatherproof flame retardant	Temperature resistant Resistant to cold, Ozone resistant, odour and tasteless	Chemicals- consistent, Resistant to oxidation, stable, gastight
-50°C / +160°C	-30°C / +100°C	-45°C / +100°C	-60°C / +200°C short-term up to 250°C	-50°C / +90°C