











Reaction of synthetic ropes under different conditions

	Material						
	Polyamide 6 / 6.6 Perlon, Nylon	Polyester (PES) Diolon, Dacron	Polypropylen (PP)	Polyethylene (HMPE): Dyneema®, Spectra	Aramid Kevlar, Twaron, Technora	LCF, Vectran Vectran	PBO Zylon
 Washing temp. °C	50 – 60	50 – 60	30	30	80 – 90	60	50
 Acids (50% konzentr.), 25°C/100°C Rest %	17 / 5 – 10	80 / 0	no reaction	no reaction	partially good resistance	very good resistance	good resistance
 Gasoline	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction
 Diesel and Oil	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction	no reaction
 Solvents	formic acid & acetic acid at high temp.	phenols, cresols zinc chloride	minimal reaction	minimal reaction	minimal reaction	minimal reaction	minimal reaction
 Alkali (Leaches)	resistant against weak solutions	resistant against solutions at 20°C; dissolves in solutions at 100 °C	resistant against weak solutions	resistant	partially good resistant	very good resistant	very good resistant
 Insulating Properties	very good; poor conductor	very good	excellent	excellent	excellent	excellent	excellent
 Highest temp. Short load approx. °C	130	170	80	70	400	200	550
 Range Exposure approx. °C	170	225	140	120	–	–	–
 Melting point approx. °C	215	260	170	150	chars at approx. 500 °C	330	chars at approx. 650 °C