

	Low density Polyethylene LDPE	High density Polyethylene HDPE	Polypropylene PP	PVC rigid	Co-Polyester PETG	Polyamide	Polycarbonate	
Physical properties of thermo-plastics	natural colour	transparent	translucent white	transparent	crystal clear	crystal clear	up to 0.5 mm wall thickness crystal clear	crystal clear
	state at 20 °C	flexible	flexible/rigid	flexible/rigid	brittle/ impact resistant	brittle/ impact resistant	flexible/tough vulnerable to folding	crystal clear
	specific weight at 20 °C	approx. 0.92	approx. 0.95	approx. 0.905	approx. 1.38	approx. 1.25	approx. 1.12	approx. 1.2
	shore hardness 20 °C	approx. 40	approx. 50	approx. 65	approx. 80	approx. 65	approx. 50	approx. 80
	tear strength at 20 °C	approx. 10 N/mm ²	approx. 20N/mm ²	approx. 30 N/mm ²	approx. 50 N/mm ²	approx. 50 N/mm ²	approx. 45 N/mm ²	approx. 60 N/mm ²
	elongation at 20 °C	approx. 500 %	approx. 500 %	approx. 650 %	approx. 30 %	approx. 15 %	approx. 200 %	approx. 100%
	water absorption	Traces	Traces	Traces	Traces	Traces	high	Traces
	diffusion	Hydrocarbons	Hydrocarbons	Hydrocarbons	Hydrocarbons	Hydrocarbons	water, Hydrocarbons	water, Hydrocarbons

This information only provides a general indication.

Chemical properties of thermo plastics	resistant against	non oxidising alkalis, organic solvents, excl. chlorinated hydrocarbons; it is advisable to carry out storage tests for testing diffusion		see LDPE/ HPDE	acids, alkalis, petrol, oil, fats, turpentine, alcohol	petrol, oils, fats, turpentine	petrol, benzene, chlorinated hydrocarbons, oils, fats	weak acids
	not resistant against	oxidising acids, oils, fats, chlorinated hydrocarbons	oxidising acids, chlorinated hydrocarbons	oxidising acids, oils, fats, chlorinated hydrocarbons	esters, ketone, benzene, chlorinated hydrocarbons, hydrogen sulphide	esters, ketone, benzene, chlorinated hydrocarbons	acids, alkalis, alcohol, water	alkalis, strong acids, esterbenzene, chlorinated hydrocarbons

This information only provides a general indication.

Applications	container size	0.001 to 1.000 l	0.001 to 3.000 l	0.01 to 120 l	0.01 to 5 l	0.01 to 1 l	0.01 to 60 l	0.01 to 30 l
	type of contents	cosmetic preparations, foodstuffs and chemicals	see LDPE, aromatic hydrocarbons, oils, fats	cosmetic preparations, foodstuffs and chemicals	wash polish, petrol, oils, fats, shoe cream, cosmetic preparations, foodstuffs	cosmetic preparations, foodstuffs	petrol, oils, fats, stain remover (tri, tetra)	cosmetic preparations, foodstuffs
	trans-formation of contents	none caused by the material itself, possibly due to diffusion			-	-	drying out without becoming moist due to diffusion of water	none caused by material itself, possibly due to diffusion
	printing-options	Screen printing	Screen printing	Screen printing	Screen printing	Screen printing	Screen printing	Screen printing
	engraving suitability	good	good	very good	vulnerable to cracking around sharp edges	vulnerable to cracking around sharp edges	vulnerable to cracking around sharp edges	vulnerable to cracking around sharp edges
	operational temperature	-40 °C to 95 °C	-40 °C to 110 °C	0 °C to 130 °C	-30 °C to 70 °C	0 °C to 65 °C	0 °C to 80 °C	-40 °C to 115 °C