

# Chemical Resistance Summary\*

	ETFE	FEP/TFE/PFA	FLPE	FLPP	HDPE	LDPE	PC	PETG	PP	PVC	TPE***
Acids, dilute or weak	E	E	E	E	E	E	E	G	E	E	G
Acids,** strong / concentrated	E	E	G	G	G	G	G	N	G	G	F
Alcohols, aliphatic	E	E	E	E	E	E	G	G	E	G	E
Aldehydes	E	E	G	G	G	G	G	G	G	G	G
Bases/Alkali	E	E	F	E	E	E	N	N	E	E	F
Esters	G	E	G	G	G	G	N	G	G	N	N
Hydrocarbons, aliphatic	E	E	E	G	G	F	G	G	G	G	E
Hydrocarbons, aromatic	G	E	E	N	N	N	N	N	N	N	N
Hydrocarbons, halogenated	G	E	G	F	N	N	N	N	N	N	F
Ketones, aromatic	G	E	G	G	N	N	N	N	N	F	N
Oxidizing Agents, strong	E	E	F	F	F	F	F	F	F	G	N

\*not for tubing chemical resistance (except pvc)

\*\*except for oxidizing acids (see Oxidizing Agents, strong)

\*\*\* TPE gaskets

**E** 30 Days of constant exposure causes no damage. Plastic may tolerate for years.

**G** Little or no damage after 30 days of constant exposure to the reagent.

**F** Some effect after 7 days of constant exposure to the reagent. Depending on the plastic, the effect may be crazing, cracking, loss of strength or discoloration.

**N** Not recommended for continuous use. Immediate damage may occur. Depending on the plastic, the effect may be severe crazing, cracking, loss of strength, discoloration deformation, dissolution or permeation loss.

This information is only a summary. To access a complete chemical resistance database, please go to [www.nalgenelabware.com/techdata/chemical/index.asp](http://www.nalgenelabware.com/techdata/chemical/index.asp)

Resin Codes	
ETFE	Tefzel <sup>1</sup> ETFE (ethylene-tetrafluoroethylene)
FEP	Teflon <sup>1</sup> FEP (fluorinated ethylene propylene)
FLPE	fluorinated high-density polyethylene
FLPP	fluorinated high-density polypropylene
HDPE	high-density polyethylene
LDPE	low-density polyethylene
PC	polycarbonate
PETG	polyethylene terephthalate copolyester
PFA	Teflon <sup>1</sup> PFA (perfluoroalkoxy)
PP	polypropylene
PVC	polyvinyl chloride
TFE	Teflon <sup>1</sup> TFE (tetrafluoroethylene)
TPE	thermoplastic elastomer

<sup>1</sup> or equivalent

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