

Plastic Chemical and Condition Compatibility Chart

This chart is only provided as a general guide and not an unqualified guarantee of chemical compatibility. Because so many factors can affect the chemical resistance of a given product, we recommend that you test under your own conditions. CAMLAB LTD assumes no responsibility for the use of this information in specific applications.

For further information or advice please call the Camlab Technical Support Team on +44 (0)1954 233120

General Condition Information

Abbreviation	Chemical Designation	Temp °C (Max)	Temp °C (Min)	Autoclavable	Microwavable	Dry Heat	Gas	Gamma	Disinfectants
ABS	Acryl-Butadienestyrene	100	-40	NO	YES	NO	YES	YES	YES
LDPE	Low Density Polyethylene	100	-80	NO	YES	NO	YES	YES	YES
HDPE	High Density Polyethylene	120	-100	NO	YES	NO	YES	YES	YES
PC	Polycarbonate	135	-135	YES	YES	NO	YES	YES	YES
PMP	Polymethylpentene (TPX)	175	-70	YES	YES	NO	YES	YES	YES
PP	Polypropylene	135	-90	YES	YES	NO	YES	NO	YES
PS	Polystyrene	70	-40	NO	YES	NO	YES	YES	YES
PTFE	Polytetrafluoroethylene (Teflon®)	250	-267	YES	YES	YES	YES	YES	YES

Solvent Compatibility

Solvent	ABS	LDPE	HDPE	PC	PMP	PP	PS	PTFE
Acetaldehyde	D	C	B	C	C	C	D	A
Acetic Anhydride	C	D	D	D	B	B	D	A
Acetone	D	C	C	D	A	A	D	A
Acid, Hydroflouric	C	A	A	D	A	B	D	A
Acid, Trifluoroacetic	D	D	C	D	D	D	D	A
Acid, Acetic Dilute 50%	A	A	A	B	A	A	B	A
Acid, Hydrochloric 37%	C	A	A	D	B	D	C	A
Acid, Nitric	B	C	B	B	A	D	C	A
Acid, Sulfuric	D	B	A	C	B	C	C	A
Alcohol, Ethyl	A	B	A	B	B	B	B	A
Alcohol, Isobutyl	A	A	A	B	A	A	B	A
Alcohol, Methyl	D	A	A	B	A	A	C	A
Alcohol, n-Butyl	A	A	A	C	B	A	B	A
Alcohol, Propyl	B	A	A	D	-	A	A	A
Ammonium Hydroxide	B	B	A	-	B	B	B	A
Aniline	D	B	B	B	B	B	D	A
Aqua Regia	D	D	C	D	D	D	D	A
Benzaldehyde	B	B	A	C	B	A	D	A
Benzene	D	D	D	D	B	B	D	D
Carbon Tetrachloride	D	B	C	D	D	B	D	A
Caustic Soda (NaOH)	B	B	A	D	A	A	A	A
Chlorobenzene	D	D	C	D	C	D	D	A
Chloroform	D	C	C	D	D	B	D	A
Cyclohexane	A	C	C	D	D	C	D	A
Esters	D	B	B	D	B	B	D	A
Ether	D	D	C	C	D	D	D	A
Ether, Diethyl	D	A	D	D	D	D	D	A
Ether, Isopropyl	B	A	A	A	A	D	A	A
Ethyl, Methyl	D	A	B	D	D	B	D	A
Hexane	D	D	B	C	C	B	D	A
Hydrazine	B	-	-	D	D	C	D	A
Hydrogen Peroxide	B	D	A	A	A	A	B	A
Methylene Chloride	D	D	C	D	C	C	D	A
Petroleum Ether	B	B	A	A	-	A	B	A
Phenol	D	D	D	D	D	D	C	A
Sodium Hydroxide	B	B	A	D	A	B	A	A
Tetrahydrofuran	D	C	B	D	C	B	D	A
Toluene	D	C	B	D	C	C	D	A
Trichloroethylene	D	D	C	D	D	D	D	A
Trimethylpentane	D	C	C	D	C	C	D	A
Xylene	D	D	C	D	C	C	D	A

A	No Effect, excellent compatibility
B	Minor Effect, good compatibility
C	Moderate Effect, fair compatibility
D	Severe Effect, not recommended
-	No data available