

Chemical & Environmental Resistance of Thermoplastics

These chemical and environmental resistance ratings for thermoplastics are provided for comparison purposes only. No assurance can be implied that any RTP Company compound will meet the ratings listed. End users should conduct their own evaluation of RTP Company compounds to ensure satisfactory compatibility with any environmental or physical conditions to which they may be exposed.

RTP Series	Base Resin		Weak Acids	Strong Acids	Weak Alkalis	Strong Alkalis	Organic Solvents	Alcohols	Hydro Carbons	Fuels	Gamma Radiation	UV Radiation
100	Polypropylene	PP	E	G^1	E	E	P^3	G	F	F	Р	F
200	Nylon 6/6	PA 6/6	G	Р	Е	F	Е	G	G	G	F	Р
200 A	Nylon 6	PA 6	G	Р	Е	F	Е	G	G	G	F	F
200 B	Nylon 6/10	PA 6/10	G	Р	Ε	F	Е	G	F	G	F	F
200 C	Nylon 11	PA 11	G	Р	Ε	F	G	Р	G	G	F	F
200 D	Nylon 6/12	PA 6/12	G	Р	Ε	F	G	Р	G	G	F	F
200 E	Amorphous Nylon	PA	G	Р	Ε	F	F	Р	F	F	F	F
200 F	Nylon 12	PA 12	G	Р	Ε	F	G	Р	Е	G	F	F
200 H	Impact-Modified Nylon 6/6	PA	G	Р	Ε	F	G	Р	F	G	F	F
200 K	Polyarylamide	PAA	G	Р	Е	F	E	G	G	G	F	F
300	Polycarbonate	PC	Е	F^1	F	Р	P^3	G	Р	Р	G	F
400	Polystyrene	PS	Е	F ¹	G	G	P^3	G	Р	Р	G	Р
500	Styrene Acrylonitrile	SAN	G	G^2	G	G	P^4	Р	Р	Р	G	Р
600	Acrylonitrile Butadiene Stytene	ABS	Е	G^1	Е	Е	P^4	Р	Р	Р	G	Р
700	High Density Polyethylene	HDPE	Е	G^1	Е	Е	G⁵	E	G	G	F	Р
700 A	Low Density Polyethylene	LDPE	Е	G	Е	Е	G	E	F	G	F	F
800	Acetal	POM	Р	Р	F	Р	E	F	G	G	Р	Р
900	Polysulfone	PSU	Е	Е	Е	Е	G	G	Р	Р	G	F
1000	Polybutylene Terephthalate	PBT	G	Р	Р	Р	E	G	Р	G	G	F
1100	Polyethylene Terephthalate	PET	G	Р	Р	Р	Е	G	Р	G	G	F
1200 S	Ester-based Thermoplastic Polyurethane Elastomer	TPU	F	Р	F	Р	Р	F	Е	G	F	Р
1200 T	Ether-based Thermoplastic Polyurethane Elastomer	TPU	F	Р	F	Р	Р	F	G	F	F	Р
1300	Polyphenylene Sulfide	PPS	Е	Е	Е	Е	G	E	E	G	G	G
1400	Polyethersulfone	PES	Е	Р	Е	Е	P^3	F	Р	F	G	F
1500	Polyether-Ester Block Copolymer Thermoplastic Elastomer	TEEE	G	Р	F	Р	P/E ⁸	E ⁶	P/E ⁸	E	Р	G

Rev May 2013

Ratings

E = Excellent

G = Good

F = Fair

P = Poor

Notes

- (1) Attacked by oxidizing acids.
- (2) Attacked by sulfuric acid.
- (3) Soluble in aromatic and chlorinated hydrocarbons.
- (4) Soluble in ketones and esters, aromatic and chlorinated hydrocarbons.
- (5) Below 176 °F (80 °C).
- (6) At ambient temperature.
- (7) Property retention with swelling.
- (8) Varies with hardness

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.



Chemical & Environmental Resistance of Thermoplastics

These chemical and environmental resistance ratings for thermoplastics are provided for comparison purposes only. No assurance can be implied that any RTP Company compound will meet the ratings listed. End users should conduct their own evaluation of RTP Company compounds to ensure satisfactory compatibility with any environmental or physical conditions to which they may be exposed.

RTP Series	Base Resin		Weak Acids	Strong Acids	Weak Alkalis	Strong Alkalis	Organic Solvents	Alcohols	Hydro Carbons	Fuels	Gamma Radiation	UV Radiation
1700	Modified Polyphenylene Oxide	PPO	Е	Е	E	E	Р	Р	F	Р	F	F
1800	Acrylic	PMMA	Р	Р	G	F	Р	Р	Р	F	G	G
1800 A	Acrylic/Polycarbonate Alloy	PC/PMMA	G	G	G	G	Р	F	Р	F	F	F
2100	Polyetherimide	PEI	Е	Е	E	Р	P^4	F	Р	F	G	F
2200	Polyetherehterketone	PEEK	Ε	Ε	Ε	E	E	E	E	G	G	G
2200 A	Polyetherketone	PEK	Е	Е	E	E	E	E	E	G	G	G
2300	Rigid Thermoplastic Polyurethane	RTPU	G	G	F	G	P^4	Р	Р	F	F	Р
2500	Polycarbonate/ABS Alloy	PC/ABS	Е	G^1	G	F	P^3	Р	Р	Р	G	F
2700 S	Saturated Styrenic Block Copolymer Thermoplastic Elastomer	TES	Е	G	Е	G	P^3	G	Р	Р	G	G
2700 U	Unsaturated Styrenic Block Copolymer Thermoplastic Elastomer	TES	Е	G	Е	G	P^3	G	Р	Р	Р	Р
2800	Thermoplastic Polyolefin Elastomer	TEO	Е	G	Е	G	P^3	E	F^7	F^7	Р	F
2900	Polyether-Block-Amide Thermoplastic Elastomer	PEBA	Е	Е	Е	Е	E	E	Е	E	F	E
3000	Polymethylpentene	PMP	Е	G^1	Е	Е	P^3	G	Р	F	G	F
3100	Perfluoroalkoxy	PFA	Е	Е	Е	Е	E	E	Е	G	G	G
3200	Ethylene Tetrafluoroethylene	ETFE	Е	Е	Е	Е	Е	Е	Е	G	G	G
3300	Polyvinylidene Fluoride	PVDF	Е	Е	Е	Е	E	E	Е	G	G	G
3400	Liquid Crystal Polymer	LCP	Е	Е	Е	Е	Е	Е	Е	G	G	G
3500	Fluorinated Ethylene Propylene	FEP	Е	Е	Е	Е	E	Е	Е	G	F	Р
3900	Poletherketoneetherketoneketone	PEKEKK	Е	E	Е	Е	E	E	E	G	G	G
4000	Polyphthalamide	PPA	Е	G	Е	G	E	G	E	G	G	F
4100	Polyetherketoneketone	PEKK	E	Е	E	E	E	E	E	G	G	G
4200	Thermoplastic Polyimide	TPI	Ε	E	E	E	E	E	E	Ε	E	E
4300	Polysulfone/Polycarbonate Alloy	PSU/PC	E	G	G	G	F	G	F	G	F	F
4400	High Temperature Nylon	HTN	F	Р	E	F	G	G	Р	G	F	F
4600	Syndiotatic Polystyrene	SPS	Е	Е	Е	Е	G	G	G	G	G	G
4700	Polytrimethylene Terephthalate	PTT	G	Р	Р	Р	Е	G	Р	G	G	F

Ratings

E = Excellent

G = Good

F = Fair

P = Poor

Notes

- (1) Attacked by oxidizing acids.
- (2) Attacked by sulfuric acid.
- (3) Soluble in aromatic and chlorinated hydrocarbons.
- (4) Soluble in ketones and esters, aromatic and chlorinated hydrocarbons.
- (5) Below 176 °F (80 °C).
- (6) At ambient temperature.
- (7) Property retention with swelling.
- (8) Varies with hardness

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is only offered as suggestion for investigation for use, based upon RTP Company or other customer experience. RTP Company makes no warranties, expressed or implied, concerning the suitability or fitness of any of its products for any particular purpose. It is the responsibility of the customer to determine that the product is safe, lawful and technically suitable for the intended use. The disclosure of information herein is not a license to operate under, or a recommendation to infringe any patents.