BOSS POLYMER TECHNOLOGIES PTY LTD

INDICATIVE CHEMICAL RESISTANCE OF THERMOPLASTICS

LEGEND

R - Recommended - Little or minor effect
M - Minor or Moderate Effect - Useful in many applications
S - Moderate or Severe Effect - Parts perhaps still useful in limited applications
N - Not Recommended
Blank Entry - Insufficient Data Available

NOTES

1. **Attacked by oxidizing acids**
2. **Attached 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.**

BASE RESIN		WEAK ACIDS	STRONG ACIDS	WEAK ALKALIS	STRONG ALKALIS	ORGANIC SOLVENTS	ALCOHOLS	HYDRO CARBONS	FUELS	GAMMA RADIATION	UV RADIATION
Polypropylene	PP	R	M[1]	R	R	N[3]	M	S	S	N	S
Nylon 6/6	PA 6/6	M	N	R	S	R	M	M	M	S	N
Nylon 6	PA 6	M	N	R	S	R	M	M	M	S	S
Nylon 6/10	PA 6/10	M	N	R	S	R	M	S	M	S	S
Nylon 11	PA 11	M	N	R	S	M	N	M	M	S	S
Nylon 6/12	PA 6/12	M	N	R	S	M	N	M	M	S	S
Amorphous Nylon	PA	M	N	R	S	S	N	S	S	S	S
Nylon 12	PA 12	M	N	R	S	M	N	R	M	S	S
Impact-Modified Nylon 6/6	PA	M	N	R	S	M	N	S	M	S	S
Polyarylaminde	PAA	M	N	R	S	R	M	M	M	S	S
Polycarbonate	PAC	R	S[1]	S	N	N[3]	M	N	N	M	S
Polystyrene	PS	R	S[1]	M	M	N[3]	M	N	N	M	N
Styrene Acrylonitrile	SAN	M	M[2]	M	M	N4	N	N	N	M	N
Acrylonitrile Butadiene Stytene	ABS	R	M[1]	R	R	N4	N	N	N	M	N
High Density Polyethylene	HDPE	R	M[1]	R	R	M5	R	M	M	S	N
Low Density Polyethylene	LDPE	R	M	R	R	M	R	S	M	S	S
Acetal	POM	N	N	S	N	R	S	M	M	N	N
Polysulfone	PSU	R	R	R	R	M	M	N	N	M	S
Polybutylene Terephthalate	PBT	M	N	N	N	R	M	N	M	M	S
Polyethylene Terephthalate	PET	M	N	N	N	R	M	N	M	M	S
Ester-based Thermoplastic Polyurethane Elastomer	TPU	M	S[1]	M	S	N	S	R	M	S	N
Ether-based Thermoplastic Polyurethane Elastomer	TPU	S	N	S	N	N	S	M	S	S	N
Polyphenylene Sulfide	PPS	R	R	R	R	M	R	S	M	M	M
Polyetheresulfone	PES	R	N	R	R	N[3]	S	N	S	M	S
Polyethere-Ester Block Copolymer Thermoplastic Elastomer	COPE	M	N	S	N	S	M6	R	R	N	N

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Modified Polyphenylene Oxide	PPO	R	R	R	R	N	N	S	N	S	S
Acrylic	PMMA	N	N	M	S	N	N	N	S	M	M
Acrylic/Polycarbonate Alloy	PC/PMMA	M	M	M	M	N	S	N	S	S	S
Polyetherimide	PEI	R	R	R	N	N4	S	N	S	M	S
Polyetherehterketone	PEEK	R	R	R	R	R	R	R	M	M	M
Polyethereketone	PEK	R	R	R	R	R	R	R	M	M	M
Rigid Thermoplastic Polyurethane	RTPU	M	M	S	M	N4	N	N	S	S	N
Polycarbonate/ABS Alloy	PC/ABS	R	M[1]	M	S	N[3]	N	N	N	M	S
Saturated Styrenic Block Copolymer Thermoplastic Elastomer	SEBS	R	M	R	M	N[3]	S	N	N	N	S
Unsaturated Styrenic Block Copolymer Thermoplastic Elastomer	SBS	R	M	R	M	N[3]	S	N	N	N	N
Valuea-Added Thermoplastic Polyolefin Elastomer	TEO	R	M	R	M	N[3]	M	S7	S7	N	S
Thermoplastic Polyolefin Elastomer	TEO	R	M	R	M	N[3]	M	S7	S7	N	S
Polyether-Block-Amide Thermoplastic Elastomer	COPA	R	R	R	R	R	R	R	R	S	R
Polymethylpentene	PMP	R	M[1]	R	R	N[3]	M	N	S	M	S
Perfluoroalkoxy	PFA	R	R	R	R	R	R	R	M	M	M
Ethylene Tetrafluoroethylene	EFTE	R	R	R	R	R	R	R	M	M	M
Polyvinylidene Fluoride	PVDF	R	R	R	R	R	R	R	M	M	M
Liquid Crystal Polymer	LCP	R	R	R	R	R	R	R	M	M	M
Fluorinated Ethylene Propylene	FEP	R	R	R	R	R	R	R	M	S	N
Polyphthalamide	PPA	R	M	R	M	R	M	R	M	M	S
Polyetherketonekteone	PEKK	R	R	R	R	R	R	R	M	M	M
Thermoplastic Polyimide	TPI	R	R	R	R	R	R	R	R	R	R
Polysulfone/Polycarbonate Alloy	PSU/PC	R	M	M	M	S	M	S	M	S	S
High Temperature Nylon	HTN	S	N	R	S	M	M	N	M	S	S
Polytrimethylene Terephthalate	PTT	M	N	N	N	R	M	N	M	M	S