JEFFSOL® Carbonates

Polymer Solubility Data

HUNTSMAN

Data on the solubility of 98 different polymers in 21 solvents and cosolvent systems at 25°C and/or 60°C are presented in the accompanying table. An explanation of the abbreviations used in the table is given in the "Glossary of Terms."

Solvents which were examined in this study included JEFFSOL® EC ethylene carbonate, JEFFSOL PC propylene carbonate, and JEFFSOL EC-50, which is a 50:50 blend of ethylene carbonate and propylene carbonate. All three are products of Huntsman Corporation.

JEFFSOL EC ethylene carbonate and JEFFSOL PC propylene carbonate are cyclic organic esters. They are excellent solvents for many polymeric materials. Their solvent properties, high flash points, low toxicity, and exemption from Rule 66-type air pollution ordinances make them outstanding choices for most polymer solvent applications today.

Solubilities were determined by adding 0.3 g of polymer to 5.7 g of solvent (5% by weight polymer). When the solvent was a binary, e.g., JEFFSOL PC plus propylene glycol methyl ether, the cosolvents were 50:50 by weight.

GLOSSARY OF TERMS

DBE	Dibasic esters from DuPont
EC	JEFFSOL EC ethylene carbonate
EC50	JEFFSOL EC-50 — 50:50 blend of ethylene carbonate and propylene carbonate
MIAK	Methyl isoamyl ketone
1LG	One layer, gel
2LG	Two layers, gel
2LNS	Two layers, not soluble
NS	Not soluble
NSG	Not soluble, gel
PC	JEFFSOL PC propylene carbonate
PM	Propylene glycol methyl ether
PMA	Propylene glycol methyl ether acetate
PS	Partially soluble
PSC	Partially soluble, cloudy
S	Soluble
SC	Soluble, cloudy
SCG	Soluble, cloudy, gel
SG	Soluble, gel
S2L	Soluble, two layers
S2LC	Soluble, two layers, cloudy
S2LG	Soluble, two layers, gel
T3CE	1,1,1-Trichloroethane
TOL	Toluene

Solubility of Various Polymers in Carbonates, Carbonate/Cosolvent Systems, and Cosolvents

See "Glossary of Terms" for explanation of abbreviations.

Polymer/Resin		PC	EC50	EC	EC50 +TOL	EC50 +DBE	EC50 +PM	EC50 +PMA	EC50 +MIAK	EC50 +T3CE	PC+ TOL	PC+ DBE	PC+ PM	PC+ PMA	PC+ MIAK	PC+ T3CE	TOL	DBE	PM	PMA	MIAK	T3CE
Acrylonitrile/Butadiene Styrene (High Butadiene Content)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	—	—	NS	—	—	—	—	—	—	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Alginic Acid, Sodium Salt	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Butyl Methacrylate/ Isobutyl Methacrylate (50/50 Copolymer)	25°C	NS	NS	—	S2L	NS	S2L	S2L	S	S2L	S	NS	S	S	S	S2L	S	—	S	S	S	S
	60°C	—	—	NS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cellulose Acetate (39% Acetyl Content)	25°C	NS	NS	—	S2L	NS	NS	NS	NS	NS	S2L	SC	SC	SC	S2L	SC	—	—	—	—	—	—
	60°C	NS	NS	S	S	S	S	S	NS	NS	S2L	SC	S	SC	NS	S	—	—	—	—	—	—
Cellulose Acetate Butyrate (17% Butyrl, 29.5% Acetyl, 1.5% Hydroxyl)	25°C	S	PS	—	S	S	S	S	S	S	S	S	S	S	S	S	—	—	—	—	—	—
	60°C	—	—	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cellulose Propionate (Medium Mol. Wt.)	25°C	S	S	—	S	S	S	S	S	S	S	S	S	S	S	S	—	—	—	—	—	—
	60°C	—	—	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cellulose Sulfate, Sodium Salt	25°C	NS	NS	—	PS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—

Polymer/Resin		PC	EC50	EC	EC50 +TOL	EC50 +DBE	EC50 +PM	EC50 +PMA	EC50 +MIAK	EC50 +T3CE	PC+ TOL	PC+ DBE	PC+ PM	PC+ PMA	PC+ MIAK	PC+ T3CE	TOL	DBE	PM	PMA	MIAK	T3CE
Cellulose Triacetate (Granular)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	S	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Ethyl Cellulose (46% Ethoxyl Content)	25°C	NS	NS	—	NS	NS	SC	SC	SC	2LNS	S	SC	S	S	S	S2L	NS	—	S	SC	NS	NS
	60°C	NS	NS	NS	S	S	S	S	PS	NS	—	SC	—	—	—	S2L	NS	—	—	—	NS	NS
Ethylene/Acrylic Acid Copolymer (20% Acrylic Acid)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Ethylene/Ethyl Acrylate Copopymer (18% Ethyl Acrylate)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Ethylene/Maleic Anhydride Copolymer	25°C	NS	NS	—	NS	NS	S	NS	NS	NS	NS	NS	S	NS	NS	NS	—	—	S	—	—	—
	60°C	NS	NS	NS	NS	NS	—	NS	NS	NS	NS	NS	—	NS	NS	NS	—	—	—	—	—	—
Ethylene/Propylene Copolymer(60% Ethylene)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Ethylene/Vinyl Acetate Copolymer (14% Vinyl Acetate)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Ethylene/Vinyl Acetate Copolymer (25% Vinyl Acetate)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	2LG	NS	NS	NS	NS	2LG	S2L	NS	NS	NS	NS	S2L	—	—	—	—	—	—
Ethylene/Vinyl Acetate Copolymer (33% Vinyl Acetate)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	2LG	NS	NS	NS	NS	2LG	S2L	NS	NS	NS	NS	S2L	—	—	—	—	—	—
Ethylene/Vinyl Acetate Copolymer (40% Vinyl Acetate)	25°C	NS	NS	—	2LG	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	S	—	—	—	—	—
	60°C	NS	NS	NS	2LG	NS	NS	NS	2LG	2LG	S2L	NS	S2L	S2L	S2L	S2L	—	—	—	—	—	—
Hydroxybutyl Methyl Cellulose (8% Hydroxy-butyl, 20% Methoxyl)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Hydroxypropyl Cellulose	25°C	NS	NS	—	S	NS	S	SC	S	2LG	NS	NS	S	SC	SC	S2L	NS	—	S	NS	NS	NS
	60°C	NS	NS	NS	—	S	—	S	—	S	S	S	—	S	S	SG	NS	—	—	S	NS	NS
Hydroxypropyl Methyl Cellulose (10% Hydroxy-propyl, 30% Methoxyl)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Methyl Cellulose	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Methyl Vinyl Ether/ Maleic Acid Copolymer (50/50 Copolymer)	25°C	NS	NS	—	NS	NS	S	NS	NS	NS	NS	NS	S	NS	NS	NS	—	—	S	—	—	—
	60°C	NS	S	S	NS	NS	—	S	NS	NS	NS	NS	—	NS	NS	NS	—	—	—	—	—	—
Methyl Vinyl Ether/Maleic Anhydride Copolymer (50/50 Copolymer)	25°C	NS	NS	—	NS	NS	—	NS	NS	NS	NS	NS	S	NS	NS	NS	—	—	S	—	—	—
	60°C	NS	NS	S	NS	NS	S	SCG	NS	NS	NS	NS	—	S	NS	NS	—	—	—	—	—	—
Nylon 6 Polycaprolactam	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Nylon 6/6 Polyhexamethylene Adipamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Nylon 6/9 Polyhexamethylene Nonanediamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Nylon 6/10 Polyhexamethylene Sebacamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—

Polymer/Resin		PC	EC50	EC	EC50 +TOL	EC50 +DBE	EC50 +PM	EC50 +PMA	EC50 +MIAK	EC50 +T3CE	PC+ TOL	PC+ DBE	PC+ PM	PC+ PMA	PC+ MIAK	PC+ T3CE	TOL	DBE	PM	PMA	MIAK	T3CE
Nylon 6/12 Polyhexamethylene Dodecanediamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Nylon 6/T Polytrimethyl Hexamethylene Terephthalamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Nylon 11 Polyundecanoamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Nylon 12 Polylaurylactam	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Phenoxy Resin	25°C	NS	NS	—	S	PS	S	S	S	S	S	S	S	S	S	S	NS	S	NS	NS	NS	NS
	60°C	PSC	NS	NS	—	S	—	—	—	—	—	—	SC	—	—	—	NS	—	NS	2LG	NS	NS
Polyacetal	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyacrylamide	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyacrylamide, Carboxyl Modified (Low Carboxyl Content)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyacrylamide, Carboxyl Modified (High Carboxyl Content)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Acrylic Acid)	25°C	NS	NS	—	NS	NS	S	NS	NS	NS	NS	NS	S	NS	NS	NS	—	—	S	—	—	—
	60°C	NS	NS	NS	NS	NS	—	NS	NS	NS	NS	NS	—	NS	NS	NS	—	—	—	—	—	—
Polyamide Resin	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	S2LG	NS	S2LG	NS	NS	S2LG	2LG	NS	2LG	NS	2LG	2LG	—	—	—	—	—	—
1,2-Polybutadiene	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(1-Butene), Isotactic	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(n-Butyl) Methacrylate	25°C	NS	NS	—	S2L	NS	2LG	2LG	S	S2L	S	S2L	S	S	S	S2L	S	S	S	S	S	S
	60°C	NS	NS	NS	S2L	S2L	S2L	S2L	—	S2L	—	S2L	—	—	—	S2L	—	—	—	—	—	—
Polycaprolactone	25°C	NS	NS	—	S	NS	NS	NS	NS	S	S	NS	NS	NS	NS	S	S	—	—	—	—	S
	60°C	S	S	PS	—	S	S	S	S	—	—	S	S	S	S	—	—	—	—	—	—	—
Polycarbonate Resin	25°C	NS	NS	—	NS	NS	NS	PS	PS	PS	PSC	PSC	NS	PSC	PSC	PSC	—	—	—	PS	NS	PS
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	SG	PSC	NS	PSC	PSC	PSC	—	—	—	NS	NS	NS
Poly(Diallyl Isophthalate)	25°C	PS	NS	—	PS	PS	PS	PS	PS	PS	NS	NS	NS	NS	NS	NS	PS	PS	NS	PS	PS	PS
	60°C	PS	NS	NS	PS	PS	PS	PS	PS	PS	PSC	PSC	PSC	PSC	PSC	NS	NS	PS	PS	PS	PS	PS
Poly(Diallyl Phthalate)	25°C	S	S	—	S	S	S	S	S	S	*	*	*	*	*	*	S	S	NS	S	S	S
	60°C	—	—	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poly(2,6-Dimethyl-p-Phenylene Oxide)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—

*Not enough sample left.

Polymer/Resin		PC	EC50	EC	EC50 +TOL	EC50 +DBE	EC50 +PM	EC50 +PMA	EC50 +MIAK	EC50 +T3CE	PC+ TOL	PC+ DBE	PC+ PM	PC+ PMA	PC+ MIAK	PC+ T3CE	TOL	DBE	PM	PMA	MIAK	T3CE
Poly(4,4-Dipropoxy-2, 2-Diphenyl Propane Fumarate)	25°C	S	NS	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	60°C	—	NS	NS	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poly(Ethyl Methacrylate)	25°C	S2L	NS	—	S	S	S	S	S	S2L	S	S	S	S	S	S	S	S	S	S	S	S
	60°C	S2L	NS	NS	—	—	—	—	—	S2L	—	—	—	—	—	—	—	—	—	—	—	—
Polyethylene, Chlorinated (25% Chlorine)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyethylene, Chlorinated (36% Chlorine)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyethylene, Chlorinated (42% Chlorine)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyethylene, Chlorinated (48% Chlorine)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polyethylene, Chloro-sulfonated (Hypalon)	25°C	NS	NS	—	S2LC	NS	NS	NS	SC	PSC	S	NS	NS	NS	S	S2LC	S	—	—	—	SC	SC
	60°C	NS	NS	NS	NS	NS	NS	NS	SC	NS	—	NS	NS	NS	—	S2LC	—	—	—	—	SC	SC
Polyethylene, High Density	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS .	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Ethylene Oxide)	25°C	NS	NS	—	S	NS	NS	NS	NS	SC	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	NS
	60°C	SC	SC	SC	—	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC	SC	S	—	—	—	—	SC
Polyethylene, Oxidized	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Ethylene Terephthalate)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Isobutyl Methacry-late)	25°C	NS	NS	—	S2LC	NS	S2LC	S2LC	S	S2LC	S	2LG	S	S	S	S	S	S	S	S	S	S
	60°C	NS	NS	NS	S2L	NS	S2L	S2L	—	S2L	—	S2LG	—	—	—	—	—	—	—	—	—	—
Polyisoprene, Chlorinated	25°C	NS	NS	—	SC	NS	NS	NS	S	NS	S	NS	NS	NS	S	NS	S	—	—	—	S	—
	60°C	NS	NS	NS	NS	NS	NS	NS	—	NS	—	NS	NS	NS	—	NS	—	—	—	—	—	—
Poly(Methyl Methacrylate)	25°C	S	S	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	60°C	—	—	S2L	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poly(4-Methyl-1-Pentene)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—		
Poly(a-Methylstyrene)	25°C	NS	NS	—	S2LC	NS	NS	NS	NS	S2LC	S2L	NS	NS	NS	PS	S2L	S	—	—	—	—	S
	60°C	NS	NS	NS	S2L	NS	NS	NS	NS	NS	SC	NS	NS	S2LG	S2LG	S2LG	—	—	—	—	—	—
Poly(p-Phenylene Ethersulfone)	25°C	NS	NS	—	S	NS	NS	NS	NS	PSC	S	NS	NS	NS	NS	NS	NS	—	—	—	—	NS
	60°C	NS	NS	NS	—	NS	NS	NS	NS	SC	—	S2LG	NS	NS	NS	SC	NS	—	—	—	—	NS
Poly(Phenylene Sulfide)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Polypropylene, Chlorinated	25°C	NS	NS	—	S	NS	NS	NS	S	S2L	S	NS	NS	S	S	S	S	—	—	S	S	S
	60°C	NS	NS	NS	NS	NS	NS	NS	—	NS	—	NS	NS	—	—	—	—	—	—	—	—	—
Polypropylene, Isotactic	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—

Polymer/Resin		PC	EC50	EC	EC50 +TOL	EC50 +DBE	EC50 +PM	EC50 +PMA	EC50 +MIAK	EC50 +T3CE	PC+ TOL	PC+ DBE	PC+ PM	PC+ PMA	PC+ MIAK	PC+ T3CE	TOL	DBE	PM	PMA	MIAK	T3CE
Polystyrene	25°C	NS	NS	—	S2L	NS	NS	NS	NS	2LG	S2L	NS	NS	NS	S2LC	NS	S	—	—	—	S	S
	60°C	NS	NS	NS	S2L	NS	NS	S2L	S2L	S2L	S2L	NS	NS	NS	S2L	S2L	—	—	—	—	—	—
Polysulftone Resin	25°C	NS	NS	—	S	NS	NS	NS	NS	NS	S	NS	NS	NS	NS	NS	NS	—	—	—	—	—
	60°C	NS	NS	NS	S2L	NS	NS	S2L	S2L	NS	—	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Tetrafluoroethylene)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Vinyl Acetate)	25°C	S	S	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
	60°C	—	—	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poly(Vinyl Alcohol), 100% Hydrolyzed	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Vinyl Alcohol), 98% Hydrolyzed	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Poly(Vinyl Butyral)	25°C	NS	NS	—	S2L	NS	2LG	2LG	S	2LG	SC	NS	NS	NS	S	NS	S	—	S	S	S	S
	60°C	NS	NS	NS	S2L	NS	S2L	S2L	—	S2L	S2LG	NS	S	NS	—	NS	—	—	—	—	—	—
Poly(Vinyl Chloride)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	1 LG	NS	NS	NS	Gel	NS	—	—	—	—	—	—
Poly(Vinyl Chloride), Carboxylated (1.8% Carboxyl)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	2LG	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	SG	NS	NS	NS	2LG	NS	Gel	NS	NS	NS	Gel	Gel	—	—	—	—	—	—
Poly(Vinyl Formal)	25°C	NS	NS	—	S	NSG	S	NS	NS	S	S	NS	NS	NS	NS	NS	NS	—	NS	—	—	NS
	60°C	S	S	S	—	S	—	S	NS	—	—	S	S	S2L	NS	S	NS	—	NS	—	—	NS
Poly(Vinyl Pyrrolidone)	25°C	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	—	—	—	—	—	—
	60°C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poly(Vinyl Stearate)	25°C	NS	NS	—	S2L	NS	NS	NS	NS	S2L	S	NS	NS	NS	NS	SC	S	—	—	—	—	PS
	60°C	S	S	S2L	S2L	S2L	S2L	S2L	S2L	S2L	—	S2L	S2L	S2L	S2L	S2L	—	—	—	—	—	S
Poly(Vinylidene Fluoride)	25°C	SC	SC	—	NS	PSC	PS	PS	PS	NS	NS	PSC	PSC	PSC	PS	NS	—	NS	NS	NS	NS	NS
	60°C	SC	SC	PS	NS	PSC	PS	PS	PS	PS	NS	PS	PS	PS	PS	PS	—	PS	NS	NS	NS	NS
Styrene/Acrylonitrile 25°C Copolymer (25% Acrylonitrile)	25°C	S	S	SC	S	S	S	S	S	S	S	S	S	S	S	S	SC	S	NS	S	S	S
	60°C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	SC	—	NS	—	—	—
Styrene/Acrylonitrile Copolymer (30% Acrylonitrile)	25°C	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	2LG	S	NS	S	S	NS
	60°C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2LG	—	NS	—	—	—
Styrene/Allyl Alcohol Copolymer (5.4 to 6% Alcohol)	25°C	NS	NS	—	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S2LC
	60°C	S	S2LC	2LG	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	S2L
Styrene/Butadiene Copolymer, ABA Block (30% Styrene)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Styrene/Butyl Methacrylate Copolymer	25°C	NS	NS	—	S2LC	NS	NS	NS	S2L	S2L	S	NS	NS	SC	S	SC	PS	—	—	S	PS	PS
	60°C	NS	NS	NS	S2LC	2LG	NS	NS	S2L	S2LG	—	2LG	NS	SC	—	2LG	PS	—	—	—	PS	—
Styrene/Ethylene/Butylene Copolymer, ABA Block (28% Styrene)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
Styrene/Isoprene Copolymer, ABA Block (14% Styrene)	25°C	NS	NS	—	S2L	NS	NS	NS	NS	S2L	NS	NS	NS	NS	NS	NS	S	—	—	—	—	S
	60°C	NS	NS	NS	S2L	NS	NS	NS	NS	S2L	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—

Polymer/Resin		PC	EC50	EC	EC50 +TOL	EC50 +DBE	EC50 +PM	EC50 +PMA	EC50 +MIAK	EC50 +T3CE	PC+ TOL	PC+ DBE	PC+ PM	PC+ PMA	PC+ MIAK	PC+ T3CE	TOL	DBE	PM	PMA	MIAK	T3CE
Styrene/Maleic Anhydride Copolymer (50/50 Copolymer)	25°C	PS	S	—	NS	S	S	S	PS	PSC	NS	SC	S	S	NS	NS	—	PS	S	PS	PS	PS
	60°C	S	—	S	NS	—	—	—	S	SG	NS	S	—	—	2LG	NS	—	S	—	S	NS	NS
Vinyl Alcohol/Vinyl Butyral Copolymer (80% Vinyl Butyral)	25°C	NS	NS	—	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	—	—	—	—	—	—
	60°C	NS	NS	NS	NS	NS	S	NS	S	NS	—	—	S	NS	S	NS	—	—	—	—	—	—
Vinyl Chloride/Vinyl Acetate Copolymer (10% Vinyl Acetate)	25°C	NS	NS	—	S	NS	NS	NS	S	S	S	NS	NS	S	S	S	NS	—	—	—	S	—
	60°C	S	NS	NS	—	S	S	S	—	—	—	S	S	—	—	—	NS	—	—	—	—	—
Vinyl Chloride/Vinyl Acetate Copolymer (13% Vinyl Acetate)	25°C	NS	NS	—	S	S	S	S	S	NS	S	S	S	S	S	S	NS	S	NS	S	S	NS
	60°C	S	NS	NS	—	—	—	—	—	NS	—	—	—	—	—	—	NS	—	NS	—	—	S
Vinyl Chloride/Vinyl Acetate Copolymer (17% Vinyl Acetate)	25°C	S	NS	—	S	S	S	S	S	S	S	S	S	S	S	S	NS	S	NS	S	S	NS
	60°C	—	S	NS	—	—	—	—	—	—	—	—	—	—	—	—	NS	—	NS	—	—	NS
Vinyl Chloride/Vinyl Acetate Copolymer, Carboxylated (83% Vinyl Chloride, 13% Vinyl Acetate, 1% Carboxyl)	25°C	NS	NS	—	S	S	S	S	S	S	S	S	S	S	S	S	NS	—	—	S	S	NS
	60°C	S	NS	NS	—	—	—	—	—	—	—	—	—	—	—	—	NS	—	—	—	—	NS
Vinyl Chloride/Vinyl Acetate/Vinyl Alcohol (80% Vinyl Chloride, 14% Vinyl Acetate, 6% Vinyl Alcohol)	25°C	S	NS	—	S	S	S	S	S	S	S	S	S	S	S	S	NS	S	NS	S	S	NS
	60°C	—	NS	NS	—	—	—	—	—	—	—	—	—	—	—	—	NS	—	S	—	—	NS
Vinyl Chloride/Vinyl Acetate/Vinyl Alcohol (91% Vinyl Chloride, 6% Vinyl Acetate, 3% Vinyl Alcohol)	25°C	NS	NS	—	S	S	S	S	S	S	S	S	S	S	S	S	NS	—	—	S	S	NS
	60°C	S	NS	NS	—	—	—	—	—	—	—	—	—	—	—	—	NS	—	—	—	—	NS
Vinylidene Chloride/ Acrylonitrile Copolymer (20% Acrylonitrile)	25°C	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NS	S	NS	S	S	NS
	60°C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NS	—	NS	—	—	NS
Vinylidene Chloride/ Vinyl Chloride Copolymer	25°C	NS	NS	—	PSC	NS	NS	NS	NS	NS	S	NS	NS	NS	NS	NS	NS	—	—	—	—	—
	60°C	NS	NS	NS	S	NS	NS	NS	S	NS	—	NS	NS	NS	S	SG	NS	—	—	—	—	—
N-Vinyl Pyrrolidone/Vinyl Acetate Copolymer (60/40 Copolymer)	25°C	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	NS	S	S	NS	NS	NS
	60°C	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	NS	—	—	S2L	NS	NS
Zein, Purified	25°C	NS	NS	—	NS	NS	S	NS	NS	NS	NS	NS	S	NS	NS	NS	—	—	S	—	—	—
	60°C	NS	NS	NS	NS	NS	—	NS	NS	NS	NS	NS	—	NS	NS	NS	—	—	—	—	—	—

Quality Policy

Huntsman Corporation is committed to providing products and services that consistently conform to our customers' requirements. To fulfill this commitment, the employees of Huntsman Corporation are dedicated to "being the best" through continuous improvement. In implementing its quality policy, Huntsman Corporation is committed to the use of statistical methods.

Product Safety Policy

It is the product safety policy of Huntsman Corporation to provide our customers with information on the safe handling and use of our products. The Material Safety Data Sheet (MSDS) should always be read and understood thoroughly before handling the product, and adequate safety procedures should be followed. Information on the toxicity, environmental, and industrial hygiene aspects of our products may be found in the MSDS.