Chemical resistance for Polypropylene

LEGEND: A ··· Excellent: no or little adverse effect.

 $B\cdots$ Good: a slight adverse effect but good to use depending on the conditions.

Pass ··· Acceptable: Preferably better not for use.

F ··· Unacceptable: Not suitable for use because of a serious adverse effect.

Solvent/chemical substance (concentration wt%, temperature °C) sulfurous acid (10/RT) A hydrochloric acid (10/RT) A (20/RT) A (20/R0) B (20/R0) B (33/RT) A aqua regia Pass perchloric acid Pass hydrogen peroxide water (3/RT) A (30/RT) A (30/S0) A chromic acid (2/70) B (10/70) Pass (25/70) F chlorosulfonic acid F pickling liquid (nitric acid20%+hydrofluoric acid49%) pickling liquid (nitric acid20%+hydrofluoric acid49%) A hydrocyanic acid A hydrocyanic acid (20/RT) A (30/RT) A (30/RT) A (30/RT) B (30/RT) Pass (61.3/RT) Pass (emitting smoke/RT) F carbonic acid A fluoroboric acid A fluoric acid A			F · · · L
hydrochloric acid (10/RT) A (20/RT) A (20/RT) A (20/80) B (33/RT) A aqua regia Pass perchloric acid Pass hydrogen peroxide water (3/RT) A (30/RT) A (30/ST) A chromic acid (2/70) B (5/70) B (10/70) Pass (10/70) Pass (25/70) F chlorosulfonic acid F pickling liquid (nitric acid20%+hydrofluoric acid4%) pickling liquid (sulfuric acid20%+hydrofluoric acid45%) A hydrocyanic acid A hydrobromic acid (20/RT) A (10/70) B (37/RT) A nitric acid (10/RT) A (10/70) B (30/RT) B (30/RT) B (30/RT) B (30/RT) Pass (61.3/RT) Pass (emitting smoke/RT) F carbonic acid A hydrofluoric acid (10/RT) A			
(20/RT) A (20/80) B (33/RT) A aqua regia Pass perchloric acid Pass hydrogen peroxide water (3/RT) A (30/RT) A (30/S0) A chromic acid (2/70) B (5/70) B (10/70) Pass (25/70) F chlorosulfonic acid F pickling liquid (sulfuric acid20%+hydrofluoric acid40%) pickling liquid (sulfuric acid40%+nitric acid15%) A hypochlorous acid A hydrocyanic acid (20/RT) A (20/70) A (37/RT) A nitric acid (10/RT) A (10/70) B (30/RT) B (30/RT) B (30/RT) B (30/RT) Pass (emitting smoke/RT) F carbonic acid A fluorosilicic acid (10/RT) A (20/RT) A (20/RT) A (20/RT) A (37/RT) A fluoroboric acid (10/RT) A (40/RT) A (40/RT) A	sulfurous acid	(10/RT)	А
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(37/RT)Anitric acid(10/RT)A(10/70)B(30/RT)B(30/70)Pass(61.3/RT)Pass(emitting smoke/RT)Fcarbonic acidBarsenic acidAfluorosilicic acidAhydrofluoric acid(10/RT)A(20/RT)Afluoroboric acidAboric acidA	hydrobromic acid	(20/RT)	А
nitric acid (10/RT) A (10/70) B (30/RT) B (30/70) Pass (61.3/RT) Pass (emitting smoke/RT) F carbonic acid B arsenic acid A fluorosilicic acid A hydrofluoric acid (10/RT) A (20/RT) A (40/RT) A fluoroboric acid A		(20/70)	А
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arsenic acid A fluorosilicic acid A hydrofluoric acid (10/RT) A (20/RT) A (40/RT) A fluoroboric acid A boric acid A	(emitting	smoke/RT)	F
fluorosilicic acid A hydrofluoric acid (10/RT) A (20/RT) A (40/RT) A fluoroboric acid A boric acid A	carbonic acid		В
hydrofluoric acid (10/RT) A (20/RT) A (40/RT) A fluoroboric acid A boric acid A	arsenic acid		А
(20/RT) A (40/RT) A fluoroboric acid A boric acid A	fluorosilicic acid		А
(40/RT) A fluoroboric acid A boric acid A	hydrofluoric acid	(10/RT)	А
fluoroboric acid A boric acid A		(20/RT)	А
boric acid A		(40/RT)	A
	fluoroboric acid		А
fluoric acid A	boric acid		А
	fluoric acid		А

Solvent/chemical sub (concentration wt%, te		Compati- bility
sulfuric acid	(10/RT)	А
	(10/70)	А
	(30/RT)	А
	(30/70)	А
	(98/RT)	Pass
(emitting	g smoke/RT)	Pass
phosphoric acid	(50/RT)	А
	(50/70)	А
	(75/RT)	А
ammonia(anhydrou	s)	А
ammonia water	(28/-)	А
liquid ammonia		В
caustic soda	(10/RT)	А
	(30/RT)	А
	(30/70)	А
caustic potash	(10/RT)	А
	(50/RT)	A
calcium hydroxide		А
calcium hydroxide		А
barium hydroxide		А
magnesium hydroxi	de	А
butyl acrylate		Pass
acetylene		А
acetamide		В
acetaldehyde		В
acetone		Pass
aniline		Pass
linseed oil		А
amyl alcohol		В
amyl naphthalene		В
benzoic acid	(50/RT)	А
isobutyl alcohol		А
isopropyl alcohol		А
isopropyl ether		В
ethanolamine		В
ethyl alcohol		В
ethyl ether		В

Solvent/chemical substance (concentration wt%, temperature °C)	Compati- bility
ethyl cellulose	А
ethylbenzene	Pass
ethylenediamine	В
ethylene chlorohydrin	Pass
ethylene glycol	А
chlorethyl	Pass
methyl chloride	Pass
chlorinated solvent	F
octyl alcohol	А
olive oil	А
oleic acid	В
gasoline (—/RT)	Pass
(-/50)	Pass
formic acid (25/RT)	А
(50/RT)	А
(90/RT)	А
xylene	F
citric acid	А
glycerine	А
cresol	В
chloroacetone	Pass
chlorobenzene	Pass
chloroform	F
kerosene	В
acetic acid (10/RT)	А
(50/RT)	В
(50/70)	Pass
(100/RT)	Pass
amyl acetate	Pass
isopropyl acetate	Pass
ethyl acetate	Pass
butyl acetate	Pass
propyl acetate	Pass
methyl acetate	Pass
salicylic acid	А
diisopropyl keton	Pass
diethyl ether	Pass

Chemical resistance for Polypropylene

LEGEND: A ··· Excellent: no or little adverse effect.

 $B\cdots Good: a slight adverse effect but good to use depending on the conditions. \\ Pass\cdots Acceptable: Preferably better not for use. \\$

F ··· Unacceptable: Not suitable for use because of a serious adverse effect.

Solvent/chemical substance (concentration wt%, temperature °C)	Compati- bility
diethylene glycol	Α
tetraethyllead	В
diethyl sebacate (DES)	Pass
carbon tetrachloride	Pass
dioctyl sebacate (DOS)	В
dioctyl phthalate (DOP)	В
cyclohexanol	В
cyclohexanone (anone)	Pass
cyclohexane	Pass
ethylene dichloride	Pass
dichlorobenzene	Pass
dibutyl ether	Pass
dibutyl phthalate (DBP)	В
dibenzyl ether	Pass
dimethylformamide (DMF)	Pass
oxalic acid	А
tartaric acid	А
stearic acid	А
styrene	В
spindle oil	А
petroleum ether	Pass
insulating oil	А
cellosolve	Pass
tannic acid	А
decalin	В
tetrahydrofuran (THF)	Pass
tetrachloroethane	Pass
tetralin (tetrahydronaphthalene)	Pass
turpentine	В
triethanolamine	В
trichloroethylene (trichlene)	Pass
toluene (toluol)	Pass

Solvent/chemical substance	Compati-
(concentration wt%, temperature °C)	bility
naphthalene	А
naphthenic acid	А
ethylene dichloride	В
methylene dichloride	Pass
nitroethane	F
nitropropane	F
nitrobenzene	Pass
nitromethane	F
lactic acid	А
perchloroethylene	Pass
hydroquinone	А
palmitic acid	А
picric acid	В
castor oil	А
furfural	F
propyl alcohol	В
fluorobenzene	Pass
hexane	Pass
hexyl alcohol	В
n-heptane	Pass
benzaldehyde	Pass
benzene (benzol)	Pass
amyl borate	В
formaldehyde (40/RT)	А
maleic acid	А
acetic anhydride	В
methyl methacrylate	Pass
methyl alcohol	В
methyl isobutyl ketone	Pass
methyl ethyl ketone	Pass
cottonseed oil	А
monoethanolamine	А

Solvent/chemical substance (concentration wt%, temperature °C) monochloroacetic acid	ompati- bility
monochloroacetic acid	
	В
monochlorobenzene	Pass
linolenic acid	А
malic acid	А
antifreezing solution (50/—)	Α
washer fluid (25/—)	А
engine oil	Α
gear oil	А
brake fluid	А
mineral oil	В
tung oil	Α
vegetable oil	А
lard	Α
fatty acid	Pass
salt	Α
soap solution	Α
developing fluid	А
asphalt	Α
benzyl ether	Pass
ammonium nitrite	А
sulfurous acid gas	Α
sodium sulfite	А
sulfur	А
mercury(II) chloride	Α
iron(II) chloride	Α
zinc chloride	А
aluminium chloride	Α
ammonium chloride	А
sodium hypochlorite (5/RT)	Α
(5/70)	В
potassium permanganate (10/RT)	Α
oxygen	Α



Manufactured and sold by:

FUKAEKASEI CO., LTD.

Head Office: 2-2-7 Murotani, Nishi-ku, Kobe 651-2241, JAPAN

TEL +81-78-991-4477 FAX +81-78-991-4491

E-mail: info@watson.co.jp https://watsonbiolab.com