

# CLEANING POLYCARBONATE

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# **ABOUT UVPLASTIC**

2003 165 50+ 1200+ 12+

Founding Time Staffs Countries Clients Millions

#### **WHO WE ARE**

**UVPLASTIC Material Technology Co., Ltd** is a *ONE-STOP SUPPLIER* in the engineering plastic field, established in 2003 in Suzhou, China. After many years of continuous effort, we have one subsidiary and three trademarks (UVPLASTIC™, UVACRYLIC™, VIEWSKY™), Main business are:

- 1. Engineering Plastic: Polycarbonate and acrylic in all forms;
- 2. Machining Service: Integrated machining solution for engineering plastic;
- 3. Application: <u>VIEWSKY Bubble Tent</u>, <u>Geodesic Dome Tent</u>, <u>Office Chair Mat</u>, <u>Riot Shield</u>, Mini-Greenhouse, etc.

Today, UVPLASTIC is active in architecture & construction, agriculture, medical industry, auto industry, security industry, electronic industry, POP display, optical industry, and industrial fabrication, etc.

#### **COOPERATION PARTNER**





**UVPLASTIC** offers high-quality engineering plastic, including polycarbonate sheets in all forms, acrylic sheets, acrylic rods, acrylic tubes, custom acrylic, etc. Meantime, provides the integrated machining services. Our trademarks are UVPLASTIC™, UVACRYLIC™, VIEWSKY™.

This cleaning method is suitable for all UVPLASTIC™ polycarbonate, including, but not limited to,

- Solid polycarbonate (UVFPC);
- Multiwall polycarbonate (UVMPC);
- Polycarbonate films (UVTPC);
- Corrugated polycarbonate (UVCPC);
- Polycarbonate roofing panels (UVRPC);
- Polycarbonate curtain wall (UVFA);
- VIEWSKY™ Bubble Tent (UV-SKY);





## Cleaning Process for UVPLASTIC™

- 1) Gently wash the sheet with the mixed liquid of lukewarm water and mild soap, using a soft, grid-free cloth to loosen the grime;
- 2) Before drying, it is easy to remove fresh paint splashes, grease and smeared glazing compounds by rubbing lightly with a soft cloth using petroleum ether (BP65), hexane or heptane. Then, cleaning polycarbonate sheet with the mixed liquid of lukewarm water and mild soap;
- 3) For Scratches and minor abrasions, you can use mild automobile polish. We suggest to test a small area with it. Then, prior to using the polish on the entire sheet. Please follow the polish instructions from the manufacturer.
- 4) Finally, using clean water to remove all residue thoroughly, and dry the surface with a soft cloth to prevent water spotting.

#### Note:

- ✓ To clean a large area of **UVPLASTIC™** polycarbonate, we suggest to use a high pressure water cleaner (Max. 100bar or 1,450psi) and/or a steam cleaner. And it will be better to test a small area, prior to cleaning the entire sheet.
- ✓ Avoiding using any additives to the water and/or steam.





#### More Matters Need Attention for UVPLASTIC™

- NEVER use aromatic or halogenated solvents like toluene, benzene, gasoline, acetone or carbon tetrachloride on UVPLASTIC™ polycarbonate;
- ◆ **NEVER** scrub with brushes, steel wool or other abrasive materials;
- NEVER use squeegees, razorblades or other sharp instruments to remove deposits or spots;
- ◆ Do **NOT** clean LEXAN polycarbonate sheet in direct sunlight or at high temperatures as this can lead to staining;
- ◆ **NEVER** use abrasive or highly alkaline cleaner on UVPLASTIC<sup>™</sup> polycarbonate materials;
- ◆ Touch with harsh solvents such as methyl ethyl ketone (MEK) or hydrochloric acid can result in surface degradation and possible crazing of polycarbonate sheet.

# More Matters Need Attention for UVPLASTIC™ Hollow, Corrugated, Roofing, Curtain Wall, VIEWSKY™ Bubble Tent

- ◆ Do **NOT** use alcohols on the UV protected surfaces of polycarbonate sheet;
- ◆ Recommended cleaners, polishing compound and solvents for polycarbonate, may not be suitable for the UV protected surfaces of UVPLASTIC™ multiwall, corrugated, roofing, curtain wall polycarbonate sheet, and VIEWSKY™ Bubble Tent.

### Remove Graffiti from UVPLASTIC™ Polycarbonate

- Using the cleaning liquid made of butyl cello-solve and soft cloth to remove paints, marking pen inks and lipstick. Washing the sheet by using mild soap and lukewarm water. Using clean water to remove residue and dry with a soft cloth;
- Removing the lifting off old and weathered paints by adhesive tape;
- Using the kerosene or petroleum ether (BP65) to remove label stickers. If it doesn't work, try to use heater (hair dryer) to soften the adhesive and remove the label sticker.





# **Chemical Compatibility**

It is to introduce the chemical compatibility of UVPLASTIC™ polycarbonate sheets <u>without coating</u> by testing in laboratory.

The test condition: Exposure to these chemical under defined conditions including temperature (20 and 80°C) and stress (0.5 and 1% strain) for seven days. The results are listed in the overview using symbols (Y or O or N) which are explained below.

- Y: Keep good performance after testing under the defined testing condition;
- O: Only the limited loss of properties, it is not critical;
- N: Not recommended, it will break polycarbonate or severe degradation.





Inorganic Salt	
Aluminium ammonium sulfate	N
Aluminium chloride	N
Aluminium fluoride	Υ
Aluminium potassium sulfate	N
Aluminium sodium sulfate	Υ
Ammonium bicarbonate	Υ
Ammonium bromide	Υ
Ammonium carbonate	N
Ammonium dichromate	Υ
Ammonium persulfate	Υ
Arsenic trioxide	N
Barium carbonate	Υ
Barium chloride	Y
Barium sulfate	Υ
Calcium carbonate paste	N
Calcium chloride	Υ
Calcium sulfate	Υ
Cesium bromide	Y
Copper (II) chloride 5%	Υ
Iron (II) chloride	N
Iron (III) ammonium sulfate	Y
Iron (III) chloride saturated	Υ
Iron (III) nitrate	N
Iron (III) sulfate	Υ
Lithium bromide	Υ
Lithium hydride powder	Υ
Magnesium bromide	Υ
Magnesium chloride	Υ
Magnesium nitrate	Υ
Nickel nitrate	Υ
Potassium bicarbonate dry	Υ
Potassium bisulfate	Υ
Potassium bromate	Υ
Potassium bromide	Υ
Potassium carbonate	Υ
Potassium chlorate	Υ
Potassium chloride saturated	N

	1
Potassium chloride 15%	Υ
Potassium chormium sulfate	N
Potassium cyanide powder	Υ
Potassium dichromate	Υ
Potassium iodide	Υ
Potassium nitrate	Υ
Potassium permanganate	N
Potassium persulfate	Υ
Potassium sulfate	Υ
Silver chloride saturated	N
Silver nitrate	Υ
Sodium bicarbonate saturated	0
Sodium bicarbonate 13%	N
Sodium bisulfate	Υ
Sodium bromate	Υ
Sodium bromide	Υ
Sodium carbonate	Υ
Sodium carbonate solvent	N
Sodium chlorate	Υ
Sodium etherlaurylsulphate	0
Sodium ferrycyanide	Υ
Sodium fluroride	Υ
Sodium hypochlorite 6%	Υ
Sodium hypochlorite 15%	N
Sodium nitrate 10%	N
Sodium perborate	Υ
Sodium phosphate	Υ
Sodium silicate	Υ
Sodium sulfide	N
Sodium sulfite	Υ
Strontium bromide	Υ
Tin (II) chloride	Υ
Tin (IV) chloride	Υ
Titanium tetrachloride	Υ
Trisodium phosphate 5%	N
Zinc bromide	Y
Zinc oxide	N
Zinc sulfate	Υ



Inorganic Salt	
Aluminium acetane	Υ
Ammonium acetate	N
Ammonium oxalate	Υ
Aniline sulfate	Υ
Potassium acetate 30%	N
Quinine sulfate	N
Sodium acetate 30%	N
Valine bromide dl	Υ

Phenol	
Allyl 4methoxyphenol	N
Cresol	N
P–Phenylphenol	N
Pentachlorophenol	N
Phenol 5%	N
Phenoxyacetic	Υ

Ketone	
Methyl ethyl ketone	N

Gaseous	
Ammonia concentrate	N
Bromine	N
Chloracetophenon	N
Chlorine	N
Iodine	N
Isobutane	N
Methane	N
Oxygen	Υ
Ozone 2%	N
Propylene	Υ
Sulfur dioxide	N
Sulphur hexafluoride	N

Halogenated HC	
Acethylene dibromo	N
Acethylene tetrabromide	N
Bromochloromethane	N
Carbon tetrachloride	N
Chlorethanol 2	N
Chlorobenzene	N
Chlorobutane	N
Chloroform	N
Dibromomethane	N
Dichloroethane	N
Dichlorohydroxybenzene	Y
Dichloromethane	N
Ethyl bromoacetate	Y

Amine	
Aniline	N
Diphenylamine	N
Methylaniline N	N
Methylene dianiline	N
Phenylhydrazine	N
Pyridine	N
Triethanolamine	Υ
Hydroxylamine	Υ

Base	
Aluminium hydroxide powder	Υ
Ammonia concentrate	N
Ammonium hydroxide 0.13%	N
Calcium hydroxide	N
Potassium hydroxide 10%	N
Sodium hydroxide dry	Υ
Sodium hydroxide 10%	N
Sodium thotalamate	Υ



Organic Acid	
Acetic anhydride	N
Formic acid concentrate	N
Gallic acid	Υ
Maleic acid	Υ
Mercapto acetic acid	N
Oleic acid	Υ
Palmitic acid	Υ
Phenol sulfonic acid	N
Phenoxyacetic acid	Υ
Phthalic anhydride	Υ
Salycilic acid	Υ
Tannic acid	Υ
Tannic acid 20%	N
Thiodiacetic acid	Υ
Trichlor acetic acid 10%	N
5% Sulfamine acid	0

Mineral Acid,	
Borax acid	Υ
Hydrogen chloride 20%	Υ
Hydrogen chloride 25%	N
Hydrogen fluoride 25%	Υ
Nitric acid 70%	N
Perchloric acid	N
Phosphorus pentoxide dry	Υ
Phosphoric acid 1%	Υ
Phosphoric acid 10%	N
Sulfuric acid 50%	Υ
Sulfuric acid 70%	N
Sulfurous acid 5%	N
Phosphorus pentachloride	Υ

Alcohol	
Ethanol	N
Ethyl glycol 60%	Υ
Ethyl glycol 100%	N
Furfuryl alcohol	N
Glycerine	Υ
Allyl alcohol	N
Amyl alcohol	N
Butoxyethanol	N
Chlorethanol 2	N
Decyl alcohol	N
Dodecyl alcohol	N
Salycilic acid	N
Hepthyl alcohol	N
Isobutanol	0
Nonyl alcohol	N
Octyl alcohol	Υ
Oxydiethanol 2.2	Y
Phenethyl alcohol	N
Polyalkylene glycol	N
Polyethylene glycol	Υ
Propylene glycol	N
Sorbitol	Υ
Thiodiglycol 5%	N
Triethylene glycol	Υ
Tripropylene glycol	N

Aldehyde	
Acetaldehyde	N
Butyraldehyde	N
Formaldehyde solvent 37%	Υ
Formalin	Υ
Propionaldehyde	N





Ester	
Benzyl benzoate	N
Butyl cellosolve acetate	N
Butyl stearate	N
Cello acetobutyrate	N
Cellulose acetate	N
Cellulose propionate	N
Dibutyl phthalate	N
Didecyl carbonate	N
Diisodecyl phthalate	N
Diisononyl phthalate	Y
Dioctyl phthalate	N
Dioctyl sebacate	N
Ditridecyl carbonate	Y
Ditridecyl phthalate	N
Ethyl bromoacetate	Y
Ethyl butyrate	N
Ethyl cellusolve 5%	N
Ethyl chloracetate	N
Ethyl cyanoacetate	N
Ethyl lactate	N
Ethyl salicylate	N
Isopropyl myristrate	N
Methyl acetate	Y
Methyl salicylate	N

Methylbenzoate	N
Triacetine	Ν
Tributoxyethyl phosphate	N
Tributyl cello phosphate	N
2 Dodecyl phenyl carbonate	Y

Ether	
Ether	N
Ethyl cellosolve 5%	N
Methyl cellosolve	N
Polyalkylene glycol	N
Polyethylene glycol	Υ
Polyethylene sulfide	N
Propylene oxide	N

Amide	
Dimethylformamide	N

Metal & Metal Oxide	
Aluminium oxide	Υ
Arsenic trioxide	N
Calcium oxide paste	N
Cuprous oxide	Υ
Mercury metallic	N





# **CONTACT US**

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