

Chemical resistance of PMMA

| | Concentration | Temperature (°C) | Quality change |
|--|--------------------|------------------|----------------|
| Acetaldehyde | 100% | 20 | 0 |
| Acetone | 100% | 23 | 0 |
| Battery acid | - | 20 | +++ |
| Amyl - acetate | 100% | 20 | 0 |
| | 30% | 23 | +++ |
| Ammonium hydroxide | 100% | 20 | 0 |
| Aniline | 100% | 23 | 0 |
| Benzaldehyde | 100% | 23 | 0 |
| Benzin (normal) | 100% | 23 | +++ |
| Benzine (with benzole) | 100% | 23 | 0 |
| Benzoilchloride | 100% | 25 | 0 |
| Benzole | 100% | 25 | 0 |
| Boron acid | 100% | 20 | +++ |
| Butyl acetate | 100% | 20 | 0 |
| Butyl chloride | 100% | 20 | 0 |
| Butyl stearate | 100% | 20 | ++ |
| Cyckohexane | 100% | 20 | 0 |
| Cycklohexanol | 100% | 20 | 0 |
| Citric acid | 10% | 25 | +++ |
| | 100% | 20 | ++ |
| Dialcylphthalat | 100% | 20 | 0 |
| | 100% | 25 | +++ |
| Diethyl ethter | 100% | 25 | +++ |
| Dimethyl formamid | 100% | 25 | 0 |
| Diocetylphthalat | 100% | 20 | 0 |
| Dioxan | 100% | 20 | 0 |
| Diesel oil | 100% | 20 | +++ |
| Dipentene | 100% | 25 | 0 |
| | 5% | 23 | +++ |
| Acetic acid | 10% | 20 | +++ |
| | 100% | 25 | 0 |
| Ethyl acetate | 100% | 23 | 0 |
| | 20% | 20 | +++ |
| Ethyl alcohol | 50% | 25 | +++ |
| | 95% | 23 | +++ |
| | 95% | 70 | 0 |
| Ethylen glycol | 100% | 20 | +++ |
| Ethylen chloride | 100% | 20 | 0 |
| Ethylen dichloridilen-dichloride | 100% | 25 | 0 |
| Ethylen oxide | 100% | 20 | 0 |
| Ethyl ether | 100% | 20 | 0 |
| Phenol | 100% | 20 | 0 |
| Hydrocarbon with fluorid (Freon, Frigen) | 100% | 20 | ++ |
| Formaldehyde | 40% | 20 | +++ |
| Phosphorus acid | 10% | 20 | +++ |
| Galvanic bath | - | 20 | +++ |
| Grease | 100% | 20 | +++ |
| Glycerin | 100% | 20 | +++ |
| | 10% | 20 | +++ |
| Formic acid | 90% | 20 | 0 |
| Heptane | 100% | 25 | +++ |
| Hexane | 100% | 23 | +++ |
| | 100% | 70 | +++ |
| Hydraulical oil | 100% | 20 | +++ |
| Hydrogen fluoride | 100% | 20 | 0 |
| | 3% | 25 | +++ |
| Hydrogen peroxide | 100% | 25 | +++ |
| Isopropyl-alcohol | 100% | 20 | ++ |
| Acidum aceticum | 100% | 20 | 0 |
| Calcium chloride | saturated solution | 20 | +++ |

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|------------------------|--------------------|----|-----|
| Potassium hydroxide | 40% | 20 | +++ |
| Potassium permanganate | 25% | 23 | +++ |
| | 25% | 70 | ++ |
| Sulphuric acid | 30% | 23 | +++ |
| | 70% | 25 | 0 |
| Chloroform | 100% | 25 | +++ |
| Chloroform | 100% | 20 | 0 |
| Chlorine/water | 2% | 20 | ++ |
| Cresol | 100% | 20 | 0 |
| Chromic acid hydride | 10% | 20 | ++ |
| Linseed oil | 100% | 20 | +++ |
| | 10% | 20 | +++ |
| | 100% | 20 | ++ |
| | 100% | 70 | 0 |
| Methylene chloride | 100% | 20 | 0 |
| Butanone | 100% | 23 | 0 |
| Monochloro benzene | 100% | 20 | 0 |
| Engine oil | 100% | - | +++ |
| Sodium hydroxide | 60% | 25 | +++ |
| Sodium hypochlorite | 5% | 25 | +++ |
| Sodium carbonate | 20% | 25 | +++ |
| Sodium chloride | 10% | 25 | +++ |
| Nitrobenzene | 100% | 20 | 0 |
| Nitro-varnish | - | 20 | 0 |
| Vegetable oils | 100% | 20 | +++ |
| Crude oil | 100% | 20 | +++ |
| Octane | 100% | 20 | ++ |
| Olive oil | 100% | 25 | +++ |
| Oxalic acid | 100% | 20 | +++ |
| Oxalic acid | saturated solution | - | +++ |
| Perchloro ethylene | 100% | 23 | +++ |
| | 100% | 70 | 0 |
| Petroleum ether | 100% | 20 | +++ |
| Petroleum | 100% | 25 | +++ |
| Propylene oxide | 100% | 70 | +++ |
| Nitric acid | 10% | 25 | +++ |
| | 10% | 70 | +++ |
| | 70% | 25 | 0 |
| Hydric chloride | 37% | 70 | +++ |
| Soap solution | - | 25 | +++ |
| Acelain acid | 100% | 20 | +++ |
| Carbon tetrachloride | 100% | 25 | 0 |
| Silicone oil | 100% | 20 | ++ |
| Synthetic detergent | 100% | 25 | +++ |
| Stearic acid | 100% | 20 | +++ |
| Lactic acid | 20% | 20 | ++ |
| Terpentine | 100% | 25 | +++ |
| Tetrahydrofurane | 100% | 20 | 0 |
| Toluene | 100% | 20 | 0 |
| Transformer oil | 100% | 20 | +++ |
| Triethyl amine | 100% | 20 | +++ |
| Trichlorin ethane | 100% | 20 | 0 |
| Trichlorin ethylene | 100% | 20 | 0 |
| Trikresyl phosphate | 100% | 20 | 0 |
| Water (distilled) | 100% | 20 | +++ |
| | 100% | 70 | +++ |
| | 100% | 25 | +++ |
| Xylene | 100% | 25 | ++ |

Key to the signs used

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satisfactory, quality deterioration max.: 15%

conditional satisfactory quality deterioration 15...50%

