

Chemical Resistance report for the:

*PUCEM TF
PUCEM HF
PUCEM SL*

Please Note:

- *Discoloration not classified as chemical attack if hardness is unchanged.*
- *Higher temperatures will reduce the chemical resistance shown in the performance table. Some chemicals may concentrate due to evaporation and become more aggressive.*
- *Mixtures of chemicals can be more aggressive than might be expected from the individual components alone.*
- *Solvent resistant performances, in practice, are expected to exceed the values noted in the performance table due to good housekeeping combined with evaporation.*
- *The chemical resistance of Epoxy screed systems will be influenced by the integrity of the surface sealer – this being dependent upon service conditions and housekeeping.*
- *The assessment is based on a resin rich screed where permeation by liquid chemicals is minimal.*
- *The use of a highly filled screed will significantly reduce the chemical resistance shown in the performance table.*

Rating & Description Explanation

| Rating | Description | Explanation |
|---------------|--------------------|---|
| 5 | Excellent | No deleterious action after long term contact |
| 3 | Medium term | Unaffected after 1 month contact but may begin to fail thereafter |
| 1 | Short term | Unaffected after 24 hours contact but may begin to fail thereafter. |
| 0 | Not resistant | Attacked on contact or within 2-3 hours |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|------------------------------|----------|-----------------------------|----------------------------|
| Acetaldehyde | | 0 | 3 |
| Acetic Acid at 20°C | 5 | 1 | 5 |
| Acetic Acid at 20°C | 10 | 1 | 5 |
| Acetic Acid at 60°C | 10 | 0 | 0 |
| Acetic Acid at 20°C | 20 | 0 | 5 |
| Acetic Acid at 20°C | 30 | 0 | 4 |
| Acetic Acid at 60°C | 30 | 0 | 0 |
| Acetic Anhydride | | 0 | 5 |
| Acetone | | 0 | 0 |
| Acetonitrile | | 0 | 5 |
| Acetyl Chloride | | 3 | 5 |
| Acrolein | | 0 | 5 |
| Acrylic acid at 20°C | | 0 | 5 |
| Acrylic Methyl Ester | | 3 | 5 |
| Acrylonitrile | | 0 | 3 |
| Adiponitrile | | 3 | 5 |
| Allyl Alcohol | | 3 | 5 |
| Allyl Chloride | | 3 | 5 |
| Aluminium Sulphate at 20°C | 30 | 5 | 5 |
| Amines | | 3 | 3 |
| Ammonia 0.880 at 20°C | | 0 | 5 |
| Ammonia (aq. Sol'n) at 20°C | 40 | 3 | 3 |
| Ammonium chloride at 20°C | 30 | 5 | 5 |
| Ammonium Nitrate at 20°C | 30 | 5 | 5 |
| Amyl Acetate (Mixed Isomers) | | 3 | 5 |
| Aniline | | 0 | 3 |
| Aromasol H | | 5 | 5 |
| Beer | | 5 | 5 |
| Benzene | | 5 | 5 |
| Benzyl Alcohol | | 0 | 5 |
| Benzyl Chloride | | 0 | 5 |
| Blood | | 5 | 5 |
| Boric Acid at 20°C | 20 | 3 | 5 |
| Brine | 30 | 5 | 5 |
| Butanol | | 1 | 5 |
| Butyl Acetate | | 3 | 5 |
| Butyl Acrylate | | 3 | 5 |
| Butyl Benzyl Phthalate | | 3 | 5 |
| Butyl Ether | | 5 | 5 |
| Butyric Acid | | 0 | 3 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|---|----------|-----------------------------|----------------------------|
| <i>Butyrolactone</i> | | 0 | 3 |
| <i>Calcium Carbonate sol'n</i> | Sat'd | 5 | 5 |
| <i>Calcium Hydroxide susp'n</i> | 30 | 5 | 5 |
| <i>Caprolactam at 20°C</i> | 20 | 5 | 5 |
| <i>Caprolactam at 20°C</i> | 30 | 5 | 5 |
| <i>Caprolactam at 20°C</i> | 50 | 5 | 5 |
| <i>Caprolactam at 20°C</i> | 100 | 5 | 5 |
| <i>Carbon Tetrachloride</i> | | 5 | 5 |
| <i>Castor Oil</i> | | 5 | 5 |
| <i>Chicken Fats</i> | | 3 | 5 |
| <i>Chloride of Lime sol'n at 20°C</i> | 1 | 5 | 5 |
| <i>Chlorinated Paraffin</i> | | 3 | 5 |
| <i>Chlorobenzene</i> | | 0 | 3 |
| <i>Chloroform</i> | | 0 | 0 |
| <i>Chromic acid at 20°C</i> | 1 | 5 | 5 |
| <i>Chromic acid at 20°C</i> | 5 | 3 | 3 |
| <i>Chromic acid at 20°C</i> | 10 | 3 | 3 |
| <i>Chromic acid at 20°C</i> | 30 | 3 | 3 |
| <i>Ciopen A30</i> | | 5 | 5 |
| <i>Ciopen A60</i> | | 5 | 5 |
| <i>Citric acid at 20°C</i> | 10 | 5 | 5 |
| <i>Citric acid at 20°C</i> | 30 | 5 | 5 |
| <i>Cleaning agent for heavy duty vehicles</i> | 10 | 0 | 5 |
| <i>Cleaning agent for heavy duty vehicles concentrate</i> | | 0 | 5 |
| <i>Cleaning petrol</i> | | 5 | 5 |
| <i>Coconut fatty acid</i> | | 5 | 5 |
| <i>Coconut oil</i> | | 5 | 5 |
| <i>Cod liver oil</i> | | 5 | 5 |
| <i>Common Salt sol'n at 20°C</i> | 5 | 5 | 5 |
| <i>Common Salt sol'n</i> | Sat'd | 5 | 5 |
| <i>Copper Sulphate sol'n at 20°C</i> | 30 | 5 | 5 |
| <i>Cotton Seed Oil</i> | | 5 | 5 |
| <i>Creosote</i> | | 3 | 5 |
| <i>Cresylic acid</i> | | 0 | 3 |
| <i>Crotonaldehyde</i> | | 0 | 3 |
| <i>Crude Oil</i> | | 5 | 5 |
| <i>Cyclohexane</i> | | 5 | 5 |
| <i>Cyclohexanol</i> | | 5 | 5 |
| <i>Cyclohexanone</i> | | 5 | 5 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|---|----------|-----------------------------|----------------------------|
| <i>Deionized water</i> | | 5 | 5 |
| <i>Detergent solution</i> | 3 | 5 | 5 |
| <i>Diacetone alcohol</i> | | 5 | 5 |
| <i>Dibutyl phthalate</i> | | 5 | 5 |
| <i>Dichlorobenzene</i> | | 3 | 5 |
| <i>Dichloroethane</i> | | 0 | 3 |
| <i>Dichloroethylene</i> | | 0 | 5 |
| <i>Dichloromethane</i> | | 0 | 5 |
| <i>Dichloropropane</i> | | 5 | 5 |
| <i>Dicyclopentadiene</i> | | 3 | 5 |
| <i>Diesel oil</i> | | 5 | 5 |
| <i>Diethanolamine</i> | | 3 | 5 |
| <i>Diethylamine (aq. Sol'n) - 20°C</i> | 50 | 0 | 3 |
| <i>Diethylamine (aq. Sol'n) - 20°C</i> | 60 | 0 | 0 |
| <i>Diethylene glycol</i> | | 0 | 3 |
| <i>Diethylene glycol monobutyl ether</i> | | 0 | 3 |
| <i>Diethylene glycol monoethyl ether</i> | | 0 | 3 |
| <i>Diethylene glycol monomethyl ether</i> | | 0 | 3 |
| <i>Diethylene triamine at 20°C</i> | 100 | 0 | 4 |
| <i>Diethylether</i> | | 0 | 3 |
| <i>Di-isobutyl ketone</i> | | 3 | 5 |
| <i>Dimethylamine (aq.sol'n) - 20°C</i> | 40 | 0 | 3 |
| <i>Dimethylamine (aq. Sol'n) - 20°C</i> | 50 | 0 | 0 |
| <i>2-Diethylaminoethanol</i> | | 3 | 3 |
| <i>Dimethyl formamide (DMF)</i> | | 0 | 0 |
| <i>Di-N-butyl phthalate</i> | | 5 | 5 |
| <i>Di-octyl phthalate</i> | | 5 | 5 |
| <i>Dioxane</i> | | 3 | 5 |
| <i>Dipentene</i> | | 5 | 5 |
| <i>Di-propylene glycol</i> | | 5 | 5 |
| <i>Dishwashing detergent</i> | 3 | 5 | 5 |
| <i>Dutrex 217 UK</i> | | 0 | 5 |
| <i>Electrocoating</i> | | 5 5 | |
| <i>Epichlorohydrin</i> | 3 | 5 | |
| <i>Ethanol at 20°C</i> | 10 | 5 | 5 |
| <i>Ethanol at 20°C</i> | 15 | 5 | 5 |
| <i>Ethanol at 20°C</i> | 70 | 5 | 5 |
| <i>Ethanol at 20°C</i> | 96 | 5 | 5 |
| <i>Ethanolamine</i> | | 3 | 3 |
| <i>Ethyl Acetate</i> | | 5 | 5 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|--|----------|-----------------------------|----------------------------|
| <i>Ethyl Acrylate</i> | | 5 | 5 |
| <i>Ethyl Benzene</i> | | 3 | 3 |
| <i>Ethylene Diamine</i> | | 3 | 3 |
| <i>Ethyl glycol</i> | | 3 | 5 |
| <i>Ethylene glycol</i> | | 5 | 5 |
| <i>Ethyl glycol acetate</i> | | 5 | 5 |
| <i>Ethylene Glycol Monobutyl ether</i> | | 3 | 5 |
| <i>Ethylene Glycol monobutyl ether acetate</i> | | 3 | 5 |
| <i>Ethylene glycol monoethyl ether</i> | | 0 | 3 |
| <i>Ethylene glycol monoethyl ether acetate</i> | | 3 | 5 |
| <i>Ethylene glycol monomethyl ether</i> | | 0 | 0 |
| <i>2-ethyl hexanol</i> | | 3 | 5 |
| <i>2-ethyl hexyl acrylate</i> | | 3 | 5 |
| <i>Ethylene Amine</i> | | 0 | 3 |
| <i>Fish Oil</i> | | 5 | 5 |
| <i>Formaldehyde at 20°C</i> | 40 | 0 | 5 |
| <i>Formaldehyde at 20°C</i> | 100 | 0 | 5 |
| <i>Formic acid at 20°C</i> | 5 | 0 | 5 |
| <i>Formic acid at 20°C</i> | 10 | 0 | 5 |
| <i>Formic acid at 20°C</i> | 20 | 0 | 5 |
| <i>Formic acid at 20°C</i> | 30 | 0 | 5 |
| <i>Formic acid at 20°C</i> | 98 | 0 | 3 |
| <i>Furfural</i> | | 0 | 3 |
| <i>Furfuryl alcohol</i> | | 0 | 3 |
| <i>Glycerol</i> | | 5 | 5 |
| <i>Grape Juice</i> | | 3 | 5 |
| <i>Groundnut oil</i> | | 5 | 5 |
| <i>Heptane</i> | | 5 | 5 |
| <i>Hexane</i> | | 5 | 5 |
| <i>Hexylene glycol</i> | | 3 | 5 |
| <i>Hydrazine Hydrate</i> | | 0 | 3 |
| <i>Hydrochloric acid at 20°C</i> | 5 | 0 | 5 |
| <i>Hydrochloric acid at 20°C</i> | 10 | 0 | 5 |
| <i>Hydrochloric acid at 20°C</i> | 36 | 0 | 3 |
| <i>Hydrochloric acid at 20°C</i> | 20 | 0 | 0 |
| <i>Hydrogen peroxide at 20°C</i> | 3 | 5 | 5 |
| <i>Hydrogen peroxide at 20°C</i> | 30 | 5 | 5 |
| <i>Hydrogen sulphide</i> | | 3 | 5 |
| <i>Iso-amyl acetate</i> | | 5 | 5 |
| <i>Iso-amyl alcohol</i> | | 5 | 5 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|--|----------|-----------------------------|----------------------------|
| <i>Iso-butanol</i> | | 5 | 5 |
| <i>Iso-butyl acetate</i> | | 5 | 5 |
| <i>Iso-butyl aldehyde</i> | | 3 | 3 |
| <i>Iso-octanol</i> | | 5 | 5 |
| <i>Iso-pentane</i> | | 5 | 5 |
| <i>Iso-phorone</i> | | 3 | 3 |
| <i>Iso-phorone diamine at 20°C</i> | | 3 | 3 |
| <i>Isoprene</i> | | 3 | 5 |
| <i>Iso-propanol</i> | | 5 | 5 |
| <i>Jet Fuel</i> | | 5 | 5 |
| <i>Kerosene</i> | | 5 | 5 |
| <i>Lactic acid at 20°C</i> | 2 | 5 | 5 |
| <i>Lactic acid at 20°C</i> | 5 | 5 | 5 |
| <i>Lactic acid at 20°C</i> | 30 | 3 | 5 |
| <i>Lactic acid at 20°C</i> | 90 | 0 | 5 |
| <i>Lard</i> | | 5 | 5 |
| <i>Lime Juice</i> | | 3 | 5 |
| <i>Linseed fatty acid</i> | | 5 | 5 |
| <i>Linseed oil</i> | | 5 | 5 |
| <i>Maleic acid at 20°C</i> | 30 | 5 | 5 |
| <i>Methanol</i> | | 5 | 5 |
| <i>Methyl acetate</i> | | 0 | 5 |
| <i>Methyl acrylate</i> | | 5 | 5 |
| <i>Methylene chloride</i> | | 0 | 0 |
| <i>Meta cresol</i> | | 0 | 3 |
| <i>Methyl ethyl ketone (MEK)</i> | | 0 | 0 |
| <i>Methyl glycol acetate</i> | | 3 | 3 |
| <i>Methyl Isobutyl ketone (MIBK)</i> | | 3 | 3 |
| <i>Methyl methacrylate</i> | | 3 | 5 |
| <i>N-methyl pyrrolidone</i> | | 0 | 0 |
| <i>Milk</i> | | 5 | 5 |
| <i>Mineral oil</i> | | 5 | 5 |
| <i>Molasses</i> | | 5 | 5 |
| <i>Morpholine</i> | | 0 | 3 |
| <i>n-a mino ethyl piperazine at 20°C</i> | | 3 | 3 |
| <i>Naphtha (petroleum)</i> | | 3 | 5 |
| <i>Naphtha (solvent)</i> | | 3 | 5 |
| <i>Naphthenic acid</i> | | 5 | 5 |
| <i>n-b utanol</i> | | 3 | 5 |
| <i>n-butyl acetate</i> | | 3 | 5 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|-----------------------------------|----------|-----------------------------|----------------------------|
| <i>n</i> -heptanol | | 5 | 5 |
| <i>n</i> -hexanol | | 5 | 5 |
| Nitric acid at 20°C | 1 | 5 | 5 |
| Nitric acid at 20°C | 3 | 5 | 5 |
| Nitric acid at 20°C | 5 | 5 | 5 |
| Nitric acid at 20°C | 10 | 5 | 5 |
| Nitric acid at 20°C | 30 | 0 | 5 |
| Nitric acid at 20°C | 69 | 0 | 0 |
| Nitrobenzene | | 0 | 0 |
| Nitro-ethane | | 0 | 0 |
| Nitro-propane (mixed isomers) | | 0 | 3 |
| Nonanol | | 3 | 5 |
| Nonyl phenol | | 5 | 5 |
| <i>n</i> -pentane | | 5 | 5 |
| Octanol | | 5 | 5 |
| Oleic acid at 20°C | 100 | 5 | 5 |
| Olive Oil | | 5 | 5 |
| Ortho cresol | | 0 | 3 |
| Orthophosphoric acid at 20°C | 85 | 3 | 5 |
| Oxalic acid at 20°C | 2 | 3 | 5 |
| Oxalic acid at 20°C | 10 | 5 | 5 |
| Palm Kernel oil | | 5 | 5 |
| Para cresol (aq) | | 0 | 3 |
| Paraffin | | 5 | 5 |
| Paraffin wax | | 5 | 5 |
| Pentane (mixed isomers) | | 5 | 5 |
| Perchloroethylene | | 5 | 5 |
| Perchloric acid at 20°C | 30 | 3 | 4 |
| Petrol | | 5 | 5 |
| Petroleum ether | | 5 | 5 |
| Phenol | | 0 | 0 |
| Phosphoric acid at 20°C | 5 | 5 | 5 |
| Phosphoric acid at 20°C | 10 | 5 | 5 |
| Phosphoric acid at 20°C | 20 | 5 | 5 |
| Phosphoric acid at 20°C | 50 | 5 | 5 |
| Photographic developer sol'n | 10 | 5 | 5 |
| Pine oil | | 5 | 5 |
| Polypropylene glycol | | 5 | 5 |
| Potassium dichromate at 20°C | 20 | 3 | 5 |
| Potassium hydroxide sol'n at 20°C | 5 | 5 | 5 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|--|----------|-----------------------------|----------------------------|
| Potassium hydroxide sol'n at 20°C | 10 | 5 | 5 |
| Potassium hydroxide sol'n at 100°C | 10 | 5 | 5 |
| Potassium hydroxide sol'n at 20°C | 20 | 5 | 5 |
| Potassium hydroxide sol'n at 20°C | 50 | 5 | 5 |
| Pyridine | | 3 | 3 |
| Pyridine bases | | 3 | 3 |
| Seawater | | 5 | 5 |
| Sec-butanol | | 3 | 5 |
| Shell Rotella oil | | 5 | 5 |
| Shellsol A | | 3 | 5 |
| Shellsol T | | 3 | 5 |
| Silicone oil | | 5 | 5 |
| Skydrol A500 | | 5 | 5 |
| Soap solution | | 5 | 5 |
| Soda solution (saturated) | | 5 | 5 |
| Soda solution (dilute) | | 5 | 5 |
| Sodium Chloride (sat'd sol'n) | | 5 | 5 |
| Sodium dichromate aq. Sol'n - 20°C | 33 | 3 | 5 |
| Sodium bicarbonate (aq) | | 5 | 5 |
| Sodium hydroxide at 20°C | 5 | 5 | 5 |
| Sodium hydroxide at 20°C | 20 | 5 | 5 |
| Sodium hydroxide at 20°C | 50 | 5 | 5 |
| Sodium hydroxide at 60°C | 50 | 0 | 0 |
| Sodium hypochlorite sol'n 15% available Cl at 20°C | | 5 | 5 |
| Sodium nitrate at 20°C | 20 | 5 | 5 |
| Solvesso 150 | | 3 | 5 |
| Soya bean oil | | 5 | 5 |
| Stannic chloride | | 5 | 5 |
| Styrene | | 3 | 5 |
| Succinic acid | 10 | 0 | 5 |
| Sugar solution at 20°C | 30 | 5 | 5 |
| Sulphuric acid at 20°C | 5 | 3 | 5 |
| Sulphuric acid at 20°C | 10 | 3 | 5 |
| Sulphuric acid at 100°C | 10 | 0 | 0 |
| Sulphuric acid at 20°C | 20 | 0 | 5 |
| Sulphuric acid at 20°C | 30 | 0 | 3 |
| Sulphuric acid at 20°C | 50 | 0 | 3 |
| Sulphuric acid at 20° | 98 | 0 | 0 |
| Sunflower seed oil | | 5 | 5 |
| Tall oil | | 5 | 5 |

| Chemical | % | Polyurethane coating | Polyurethane screed |
|----------------------------------|----------|-----------------------------|----------------------------|
| <i>Tall oil fatty acid</i> | | 5 | 5 |
| <i>Tallow</i> | | 5 | 5 |
| <i>Tapwater</i> | | 5 | 5 |
| <i>Tartaric acid at 20°C</i> | 5 | 5 | 5 |
| <i>Tartar solution at 20°C</i> | 5 | 0 | 5 |
| <i>Teepol</i> | | 5 | 5 |
| <i>Tert-butanol</i> | | 3 | 5 |
| <i>Tetrachloroethylene</i> | | 3 | 5 |
| <i>Tetrahydrofuran (THF)</i> | | 0 | 3 |
| <i>Tetrahydronaphthalene</i> | | 3 | 5 |
| <i>Titanium tetrachloride</i> | | 3 | 3 |
| <i>Toluene</i> | | 1 | 1 |
| <i>Toluene-di-isocyanate</i> | | 5 | 5 |
| <i>Tributyl citrate</i> | | 5 | 5 |
| <i>1,1,1 – trichloroethane</i> | | 0 | 5 |
| <i>Trichloroethylene</i> | | 0 | 0 |
| <i>Tri cresyl phosphate</i> | | 5 | 5 |
| <i>Triethanolamine</i> | | 3 | 5 |
| <i>Triethylene glycol</i> | | 5 | 5 |
| <i>Triethylene cetramine</i> | | 3 | 5 |
| <i>Triolyl phosphate</i> | | 5 | 5 |
| <i>Trixylyl phosphate</i> | | 5 | 5 |
| <i>Urea at 20°C</i> | 30 | 5 | 5 |
| <i>Vegetable Juice</i> | | 5 | 5 |
| <i>Water at 20°C</i> | | 5 | 5 |
| <i>Water, distilled at 100°C</i> | | 5 | 5 |
| <i>Whisky</i> | | 5 | 5 |
| <i>White Spirit</i> | | 5 | 5 |
| <i>Wine</i> | | 5 | 5 |
| <i>Xylene (mixed Isomers)</i> | | 5 | 5 |