



MasterSeal 7000 CR

Chemical Resistance Guide





MasterSeal 7000 CR–Durable Concrete Protection Even under Extreme Conditions

MasterSeal 7000 CR is a concrete protection and waterproofing system with a unique combination of application and performance properties designed for challenging environments and facilities that demand a high level of protection and process safety.

The systems high resistance to abrasion and biogenic sulfuric acid corrosion are ideal to withstand the severe conditions that occur in pretreatment and aeration tanks, digesters, or sewers. Its dynamic and static crack-bridging abilities ensure that concrete is protected, even in case of cracks, thus prolonging the structures life cycle.

The chemical resistance table below provides information on the resistance of MasterSeal 7000 CR to a wide variety of chemical / corrosive elements as determined by field experience and laboratory tests. We recommend you to contact your local Master Builders Solutions expert for further advise and support.

Tabel 1: MasterSeal 7000 CR Chemical Resistance Overview

| Chemical | Conc. | Temp. | EN 13529 | MasterSeal 7000 CR |
|------------------------------|--------------|-------|----------|--------------------|
| A Acetaldehyde | 100 | 20 | DF 7 | |
| Acetic acid | 10 | 20 | DF 9 | color change |
| Acetic acid | 40 | 20 | DF 9a | |
| Acetic acid | 99 (Glacial) | 20 | DF 9a | |
| Acetic anhydride | 100 | 20 | DF 7 | |
| Acetone | 100 | 20 | DF 7 | |
| Acetophenone | 100 | 20 | DF 7a | |
| Acrylic acid | 100 | 20 | DF 9a | |
| Adipic acid | Saturated | 20 | DF 9a | |
| Aluminium sulphate | 50 | 20 | DF 12 | |
| Ammonium hydrogen phosphate | 7 | 40 | | |
| Ammonium hydroxide | 28 | 20 | | |
| Ammonium nitrate | 50 | 20 | | |
| Ammonium sulphate | 50 | 20 | | |
| Amyl acetate | 100 | 20 | DF 7 | |
| Aniline | 100 | 20 | DF 13 | |
| Antifreeze (Ethylene glycol) | 100 | 20 | DF 5 | |

| | Chemical | Conc. | Temp. | EN 13529 | MasterSeal 7000 CR |
|---|-------------------------------------|-----------|-------|----------|--------------------|
| B | Benzene | 100 | 20 | DF 4a | color change |
| | Benzoic acid | 100 | 20 | DF 9a | |
| | Benzoyl chloride | 100 | 20 | DF 6b | |
| | Bio diesel (transesterified lipids) | 100 | 20 | DF 7b | |
| | Boric acid | Saturated | 20 | DF 10 | |
| | Brake fluid (polyglycols) | - | 20 | DF 5 | |
| | Brine (Sodium chloride) | Saturated | 20 | DF 12 | |
| | Butanol | 100 | 20 | DF 5 | |
| C | Calcium chloride | 50 | 20 | DF 12 | |
| | Calcium hydroxide | Saturated | 20 | DF 11 | |
| | Carbon tetrachloride | 100 | 20 | DF 6a | |
| | Castor oil (fatty acids) | 100 | 20 | DF 9a | |
| | Chlorine Bleaching | | 50 | | |
| | Chlorine water | Saturated | 20 | | |
| | Chloroacetic acid | 10 | 20 | DF 9 | color change |
| | Chloroacetic acid | 50 | 20 | DF 9a | |
| | Chloroform | 100 | 20 | DF 6a | |
| | Citric acid | 20 | 20 | DF 9a | |
| | Citric acid | 60 | 20 | DF 9a | |
| | Copper (II) sulphate | Saturated | 20 | DF 12 | |
| | Cresols | 100 | 20 | DF 9 | color change |
| | Crude oil | - | 20 | DF 4b | |
| | Cyclohexane | 100 | 20 | DF 4 | |
| D | Decanoic (Capric) acid | 100 | 20 | DF 9a | |
| | Detergents (acidic) | - | 20 | DF 10 | |
| | Detergents (alkaline) | - | 20 | DF 11 | |
| | Diethylene glycol | 100 | 20 | DF 5 | |
| E | Ethanol | 100 | 20 | DF 5 | |
| | Ethyl acetate | 100 | 20 | DF 7 | |
| | Ethyl glycol acetate | 100 | 20 | DF 7 | |
| | Ethylene dichloride | 100 | 20 | DF 6 | |
| | Ethylene glycol | 100 | 20 | DF 5 | |
| F | Formic acid | 5 | 20 | | |
| | Formic acid | 40 | 20 | | |
| | Fumaric acid | Saturated | 20 | DF 9a | |
| G | Gallic acid | 100 | 20 | DF 9a | |
| | Gasoline | - | 20 | DF 1 | |
| | Glycolic acid | 100 | 20 | DF 9a | |
| H | Heptanoic acid | 100 | 20 | DF 9a | |
| | Hexane | 100 | 20 | DF 4 | |

| | Chemical | Conc. | Temp. | EN 13529 | MasterSeal 7000 CR |
|----------|------------------------------|-------|-------|----------|--------------------|
| | Hydrochloric acid | 10 | 20 | DF 10 | |
| | Hydrochloric acid | 37 | 20 | | |
| | Hydrogen peroxide | 30 | 20 | | |
| I | Isopropanol | 100 | 20 | DF 5 | |
| J | Jet fuel | - | 20 | DF 2 | |
| K | Kerosene | - | 20 | DF 2 | |
| L | Lactic acid | 5 | 20 | DF 9 | color change |
| | Lactic acid | 25 | 50 | | |
| | Lactic acid | 85 | 20 | DF 9a | |
| M | Magnesium nitrate | 50 | 20 | DF 12 | |
| | Maleic acid | 30 | 20 | DF 9a | |
| | Maleic anhydride | 100 | 20 | DF 7 | |
| | Malic acid | 50 | 20 | DF 9a | |
| | Methacrylic acid | 100 | 20 | DF 9a | |
| | Methanol | 100 | 20 | DF 5a | |
| | Methyl ethyl ketone | 100 | 20 | DF 7 | |
| | Methyl methacrylate | 100 | 20 | DF 7 | |
| | Methyl salicylate | 100 | 20 | DF 7a | |
| | Methylated spirits | - | 20 | DF 4 | |
| | Methylene chloride | 100 | 20 | DF 6a | |
| | Milk | - | 20 | DF 9 | color change |
| | Mineral oils | - | 20 | DF 3 | |
| | Monochlorobenzene | 100 | 20 | DF 6b | |
| | Motor oil | - | 20 | DF 3 | |
| N | Nitric acid | 5 | 20 | DF 10 | |
| | Nitric acid | 30 | 20 | | color change |
| O | Oleic acid | 100 | 20 | DF 9a | |
| | Oleum (fuming sulfuric acid) | - | 20 | | |
| | Oxalic acid | 5 | 20 | DF 9 | color change |
| P | Paraffin | - | 20 | DF 4 | |
| | Perchloroethylene | 100 | 20 | DF 6 | |
| | Phenol | 5 | 20 | DF 9 | color change |
| | Phenyl sulphuric acid | 10 | 20 | DF 9 | color change |
| | Phosphoric acid | 5 | 20 | DF 10 | |
| | Phosphoric acid | 50 | 20 | | |
| | Phosphoric acid | 85 | 20 | | color change |
| | Picric acid | 10 | 20 | DF 9 | color change |
| | Picric acid | 50 | 20 | DF 9a | |
| | Potassium hydroxide | 50 | 20 | | |
| | Propylene glycol | 100 | 20 | DF 5 | |

| | Chemical | Conc. | Temp. | EN 13529 | MasterSeal 7000 CR |
|---|--|-----------|-------|----------|--------------------|
| S | Salicylic acid | Saturated | 20 | DF 9a | |
| | Silage water (3% milk + 1.5% vinegar +0.5% butyric acid) | | 40 | | |
| | Sodium chloride | Saturated | 20 | DF 12 | |
| | Sodium hydroxide | 20 | 20 | DF 11 | |
| | Sodium hydroxide | 50 | 20 | | |
| | Sodium hydroxide | 50 | 60 | | |
| | Sodium hypochlorite | 15 | 20 | | |
| | Styrene | 100 | 20 | DF 4 | |
| | Sulphuric acid | 20 | 20 | DF 10 | |
| | Sulphuric acid | 30 | 60 | | |
| | Sulphuric acid | 50 | 20 | | |
| | Sulphuric acid | 98 | 20 | | |
| T | Tar oil | - | 20 | DF 4 | |
| | Tartaric acid | Saturated | 20 | DF 9 | color change |
| | Tetrahydrofuran | 100 | 20 | DF 15 | |
| | Thioglycolic acid | 100 | 20 | DF 9a | |
| | Toluene | 100 | 20 | DF 4 | |
| | Toluene sulphonic acid | 100 | 20 | DF 9a | |
| | Trichloroacetic acid | 100 | 20 | DF 9a | |
| | Trichlorobenzene | 100 | 20 | DF 6b | |
| | Trichloroethylene | 100 | 20 | DF 6 | |
| | Turpentine | - | 20 | DF 4 | |
| U | Urea | 35 | 20 | DF 12 | |
| W | Waste water | - | 20 | | |
| | Water (distilled) | 100 | 40 | | |
| | White spirit | - | 20 | DF 4 | |
| X | Xylene | 100 | 20 | DF 4 | |

Rating Descriptions

- not resistant
- max. 72 h resistance
- good chemical resistance, suitable for permanent contact
- high chemical resistance, suitable for permanent immersion (up to 1 bar pressure)

Please note:

For a more accurate data on the long-term resistance, please check the hardness reduction given on the TDS.

General remark: Overall performance of MasterSeal 7000 CR is subject to reasonable standards of checks and cleaning.



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Complete solutions for air entrained concrete

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Solutions for concrete strengthening

MasterCast

Solutions for the manufactured concrete product industry

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Solutions for cement manufacture

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Low viscosity for high performance concrete

MasterEmaco

Solutions for concrete repair

MasterFinish

Solutions for formwork treatment and surface improvement

MasterFlow

Solutions for precision grouting

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MasterInject

Solutions for concrete injection

MasterKure

Solutions for concrete curing

MasterLife

Solutions for enhanced durability

MasterMatrix

Advanced rheology control for concrete

MasterPel

Solutions for hydrophobization, anti-efflorescence and surface protection

MasterPolyheed

Solutions for mid-range concrete

MasterPozzolith

Solutions for water-reduced concrete

MasterProtect

Solutions for concrete protection

MasterRheobuild

Solutions for high strength concrete

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MasterSure

Solutions for extraordinary workability retention

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Ucrete

Flooring solutions for harsh environments



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Let the numbers do the talking: We have portrayed some of our most eco-efficient product solutions for concrete and precast production, construction, civil engineering, and flooring.

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MBS-01-2021-ICR-0082-EN