VETRO POWER

**Technical Data Sheet (TDS)**

# VETRO POWER GLASS & CERAMIC PROTECT

## Hydrophobic, Easy-to-Clean Nano Coating for Glass and Ceramic Surfaces

Vetro Power Glass & Ceramic Protect is a ready-to-use, transparent surface protection system based on silicon dioxide sol-gel chemistry in an ethanol carrier, optimised for glass and ceramic surfaces in industry and trade. It makes the surface water-, oil- and soil-repellent without changing its look and feel. A concentrated version is available for volume users.

### APPLICATION AREA:

Windows, glass facades, porches, mirrors, lenses, bathrooms, glazed tiles, wash basins, toilets, winter gardens, shower screens and worktops.

### MATERIALS:

Glass, glazed ceramic, porcelain and other smooth, non-absorbent glass and ceramic surfaces.

### PHYSICAL CHARACTERISTICS:

| Property | Value |
|---|---|
| **Form** | Liquid, ready-to-use, solvent-based |
| **Density** | 0.8 g/cm³ |
| **Viscosity** | approx. 1.2 mPas |
| **Flash point** | < 15 °C |
| **Boiling point** | approx. 80 °C |
| **Storage temperature** | -5 °C to +30 °C |
| **Shelf life** | At least 2 years unopened; use within 6 months of opening |
| **Pack sizes** | 1 L, 5 L, 25 L, 200 L, 1,000 L |

### PERFORMANCE DATA (INDEPENDENT TEST CERTIFICATES):

| Test | Result |
|---|---|
| **Water contact angle, ISO 11507, 3,500 h UV (Polymer Service GmbH)** | 116.7° initial, 95.3° after 3,500 h; untreated glass 10° to 15° |
| **Flexural strength, DIN 1249-12, DIN 18516-4, EN 12150-1 (Friedmann & Kirchner)** | Coated single-pane safety glass meets the normative requirements |
| **Reflection (FT-IR) and transmission (UV-Vis) (IGR)** | No difference in reflection; visible transmission unchanged |
| **Food safety (CBA GmbH)** | Meets LFGB sections 30 and 31 and Regulation (EC) 1935/2004 |

### CONSUMPTION:

About 800 to 1,000 sq ft per litre of ready-to-use coating (roughly 11 to 14 ml/m²), depending on the surface and the application method.

### FEATURES:

- Hydrophobic and oleophobic
- Soil-repellent, easy-to-clean
- No change in look and feel
- High abrasion resistance
- Resistant to high-pressure and steam cleaners up to 60 bar (depending on the substrate)
- Food-safe
- Temperature resistance up to 450 °C (peak)
- UV-stable
- Resistant to chemicals from pH 2.5 to 12
- Repeated graffiti removal possible
- PFOA-free and PFAS-free (silicon dioxide sol-gel chemistry)

### APPLICATION METHOD:

**Preparation:** Clean the surface with Vetro Power Pre Cleaner so that it is free of dust, grease and residues of cleaning agents. For all surfaces, we recommend testing for stability and functionality on an inconspicuous area first.

**Spraying (recommended):** Apply with a spray device (HVLP nozzles). Industrial spray devices are suitable; on larger surfaces work square metre by square metre and avoid ponding. Alternatively wipe on with a soft, lint-free cloth.

**Hardening:** As soon as the ethanol has evaporated, the surface can be stored, transported, entered and processed. Full hardening after 24 hours at ambient temperature (20 °C); the process can be accelerated with additional warmth.

### CLEANING AND CARE:

The treated surface is resistant to conventional cleaning agents. Contamination can be removed with water; stronger contamination with water and a mild cleaner of pH 5 to 7. Dried graffiti can be removed with Vetro Power Pre Cleaner. Avoid abrasive scouring, hydrofluoric acid and highly alkaline chemicals such as bleach and caustic soda. The durability of the surface protection depends on the kind and the frequency of cleaning and care.

### NOTE:

Due to the raw material used, different visual colour changes can happen. This can appear occasionally batch-related and does not constitute a reason for complaint of the respective product.

Flammable liquid (flash point below 15 °C). Keep away from heat, sparks and open flames and use in a ventilated area.

**Warning Advice:** We recommend wearing suitable protective clothing. In case of contact with skin, immediately rinse off with water. Do not swallow. Avoid contact with eyes. In case of contact with the eye or mucosa, immediately rinse off with water. In the event of symptoms occurring, seek medical treatment. Keep out of reach of children!

**General advice:** Do not inhale atomised spray and the liquid product.

Zyax Chem Pvt. Ltd. is not liable for damages to the product, as a result of dirt entering the bottles and canisters, e.g. after opening the containers. Zyax Chem Pvt. Ltd. is also not liable for improper application of the product if the surfaces have been recoated for any reasons, without Zyax Chem Pvt. Ltd.'s prior written agreement, nor for any damage to or deterioration of the coating system arising from causes beyond the control of Zyax Chem Pvt. Ltd., including but not limited to impact, abrasion, mechanical damage, neglect, malicious damage, fire damage, pollution and abnormal weather conditions, neither for failure associated with exposure of the coatings to abrasive, chemical substances, abrasive scouring, hydrofluoric acid and highly alkaline chemicals such as bleach, potassium hydroxide and sodium hydroxide and/or if the coated surfaces have not been maintained in accordance with the supplier's recommended maintenance procedures. All information is based on today's state-of-the-art technology. As to the above-mentioned information, we do not lay a claim to completeness, these are only to be understood as possible examples for application areas. Due to a large number of surfaces and object conditions, the buyer/user is not relieved of the duty to professionally verify, in his own responsibility, that our materials are suitable for the intended purpose according to the respective object conditions. In all other respects, our general conditions of sale apply. If the new product information is issued the validity of the old version expires.

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