

1. Name of product and the company

Name of product	OC-aquasil™ Tex 304
Intended use of product	Non-fluorinated water repellent fabric treatment. For industrial use.
Company	OrganoClick AB

2. Product description and use

The product's intended use is to confer durable water repellent properties to textiles. The water repellent properties withstand repeated cycles of home laundering and drying.

The product is specifically intended for fabrics containing polyester (PES), polyamide (PA) and blends, e.g. polyester/cotton or polyamide/elastane, but good results may also be feasible on other fibre materials, e.g. wool, cotton, viscose, acetate etc. In order to confer good water repellent properties, the product shall be used on fabric with a minimum of other chemical surface treatments. If other chemical surface treatments are necessary, the product shall always be the outermost (last applied) treatment (except for coating/laminating for water-proofness, which usually can be performed *after* treatment with OC-aquasil™ Tex 304).

3. Physical and chemical properties

Form	Milky liquid
Colour	White
Odor	Odourless, sweet notes
Viscosity	5-10 cP (200 rpm, Lv1, 24°C)
pH	3.5-4.5
Ion type	Cationic

4. Handling

Avoid contact with skin and eyes. Avoid release to the environment. Ensure adequate ventilation, also in drying/curing equipment. Normal precautions taken when handling chemicals should be observed. See the Safety Data Sheet for further information.

5. Usage instructions

The product shall be applied to fabric as an after-treatment (i.e. finishing) with subsequent drying and curing. Prior to using the product on a full industrial scale, the product shall be tested on small samples of the fabric in order to evaluate the required wet uptake, how much the product should be diluted with water and the exact drying time/temperature. Special attention should be paid to the aesthetic appearance and hand feel of the treated fabric as a function of wet uptake and concentration. The water repellent performance shall always be evaluated after having diluted the product with water.

Suggested recipes

100% Polyamide, Polyester, and their Elastane blends (5-10 washing cycles)

50 – 100 g/L OC-aquasil™ Tex 304

Synthetics and their blends with higher laundry durability (10-30 washing cycles)

100 – 250 g/L OC-aquasil™ Tex 304

100% Cottons and cotton blends: For durability of 10 washing cycles

300 – 500 g/L OC-aquasil™ Tex 304 or 100 – 250 g/L OC-aquasil™ Tex 304
5 – 15 g/L cationic booster/extender

Dilute the OC-aquasil™ Tex 304 with water and stir gently. Apply to fabrics by means of pad-dry-cure, or spray-dry-cure, curing for 30 – 180 s at temperatures of 110 – 170 °C. For spray applications a dilution of at least 150 g/L is required.

General recommendations:

- The product (including the diluted product) shall be stirred thoroughly prior to applying it to the fabric or in conjunction to the application. Add water gently into the product and stir the diluted product gently. Avoid rapid movements that otherwise may dissolve air into the dilution and thereby create foam.
- Impregnate the fabric in a bath of the diluted product and squeeze out the excess liquid (known as padding). Aim at a wet uptake of approximately 50-80 %.
- Or apply to fabrics or objects through a spray process. Make sure the nozzles are tuned such that complete wetting of the product is ensured.
- Dry according to the fabric's prerequisites. The treated fabric or item should always be completely dry to observe the desired effect.
- The treated fabric shall be cured at 110 – 170 °C for 30 – 180 seconds. The curing conditions are highly dependent on the fabric type and process procedure.

6. Cleaning of Equipment

After using the product all equipment shall be properly cleaned by scrubbing them with water, preferably containing dishwashing liquid or equivalent. The cleaning shall be performed quickly after the equipment has been used so the product does not have time to dry out. Equipment that is not possible to scrub (e.g. pipes and spraying nozzles) shall be flushed thoroughly with water and possibly also with an organic solvent such as ethanol, acetone or isopropanol.

7. Storage

Store in tightly closed original container in a well-ventilated area between 15 - 30 °C.

The information in this technical data sheet consists of guidelines from the OC-aquasil™ Tex Safety Data Sheet, OrganoClick AB test results, accumulated knowledge and experience with the product. The information is not to be used as basic data or verification for other tests or systems. OrganoClick AB does not take responsibility for any other usage areas or any misuse of the OC-aquasil™ Tex product. The latest edition of this data sheet can be requested from OrganoClick AB.