



Lavasol[™] 5 is a low pH (acidic), low foaming liquid cleaner devised to remove silica and other inorganic scales present on polyamide thin-film composite, cellulose acetate or ultrafiltration membranes. Silica is inherently difficult to remove, but Lavasol[™] 5 was specifically formulated to target and remove tough silica scale, while helping remove other inorganic scales present. For systems where predominate inorganic scale is not silica, it is best to use a broad spectrum low pH cleaner (Lavasol[™] 1 or OptiClean[™] A) prior to Lavasol[™] 5.

Features / Benefits

- Extremely effective silica specific cleaner
- Phosphate-free formula to reduce negative impact on the environment
- Can be mixed with other low-pH cleaners such as Lavasol™ 1 for a comprehensive cleaning
- Buffered pH to maintain optimum cleaning performance throughout cleaning cycle
- Classified for use in membrane systems producing drinking water (ANSI/NSF Standard 60)

Uses

- For use on reverse osmosis (RO), nanofiltration (NF), ultrafiltration (UF) and micro-filtration (MF) membranes
- For effective removal of silica fouling from polyamide membrane elements
- Will also dissolve inorganic scales as Lavasol™ 5 is an acidic formulation

Specifications

Appearance	Pale yellow liquid
pH (2% solution)	3.50 - 4.00
Density (kg/liter)	1.00 - 1.10



Packaging

Pail: 5 gallon/18.9 liter Tote: 275 gallon/1,040 liter

Drum: 55 gallon/208 liter

For special packaging options, please contact PWT or your local distributor.





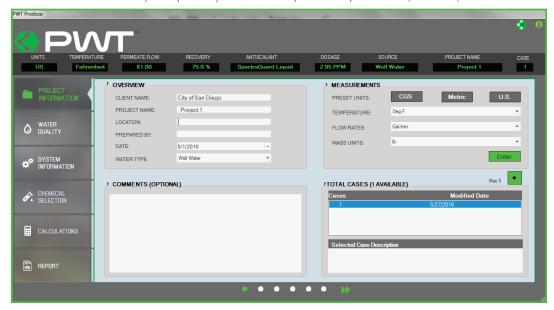
General Mixing & Application Instructions for Lavasol™ 5

- Inspect all cleaning system components to include CIP tank, hoses, and cartridge filters. Flush or replace if necessary. Fill cleaning tank with RO permeate or DI water. Turn on agitator or tank recirculation pump.
- 2. Slowly add Lavasol™ to cleaning tank (1 gal [3.8 L] of Lavasol™ for every 50 gal [189 L] of water). Mix thoroughly. The solution pH should match product specification. If necessary, adjust pH with a membrane–approved chemical such as caustic, citric, sulfuric or hydrochloric acid. The solution should be heated up to 45°C to improve cleaning efficacy.
- 3. Circulate solution in the same direction as the feed flow. Typical circulation times are 30-90 minutes.* PWT recommends cleaning each stage of the system separately. Maximum flow rate per pressure vessel is 40 gpm (152 Lpm) for 8-inch elements and 10 gpm (38 Lpm) for 4-inch elements. Maximum pressure for cleaning is 60 psig (4.2 kg/cm²).
- In cases of heavy fouling, divert the first 10-20% of cleaning solution to drain to prevent redeposition of removed solids.
- 5. Rinse with RO permeate before returning system to service. When returning unit to service, divert product water to drain until any residual cleaning solution has been rinsed from system.
 - *Depending on the nature of the fouling, a soak period may be necessary for optimum results. Please contact PWT or your local distributor for custom cleaning procedure, or consult PWT's Technical Bulletin 503 for further cleaning recommendations.

ProDose XPRT™ - Scaling Prediction Software

ProDose XPRT™ uses the most accurate scaling prediction calculations available to accurately determine effective antiscalant dosage, and cleaning chemical usage. The user can enter multiple cases to study various operating conditions, directly enter concentrate analysis, and select the best PWT product and dosage for the application.

ProDose XPRT™ is available upon request only. Please contact your PWT representative for more information.





PWT Headquarters & Manufacturing 1048 La Mirada Court, Vista, California 92081





