

OXSILAN[®] 9810/1

The eco-friendly zinc-phosphate replacement system for multi-metal applications



Advantages:

- + Ambient temperature process
- + Significant process cost savings achievable
- + Higher productivity due to fewer process steps
- + Simple waste water treatment
- + Multi-metal application

Applications:

- + General Industry:
HVAC, Household Appliances, Heavy Equipment, Job Coaters
- + Automotive Components
- + Coil Industry
- + Customers with high testing specifications

The unique and eco-friendly OXSILAN[®] 9810/1 process is formulated to yield performance similar to a zinc-phosphate process, targeting applications with high specifications. The silane-based conversion coating system is free of phosphates and hazardous heavy metals, thus ensures simplified waste treatment and easy maintenance as it produces almost no sludge.

OXSILAN[®]9810/1 works on different metal substrates and improves paint adhesion and corrosion resistance in combination with current paint systems.

Due to the simplified process, significant cost savings can be achieved.

OXSILAN® 9810/1

The eco-friendly zinc-phosphate replacement system for multi-metal applications

OXSILAN® 9810/1 is a silane-based, multi-purpose, liquid pre-paint treatment.

The OXSILAN process can be utilized in operations processing a wide range of steel alloys or in multi-metal operations where steel alloys are the major throughput part.

The process is used at energy-saving ambient temperature by spray or immersion.

Technical Requirements

- Tank materials and equipment made of stainless steel
- DI water or RO water required
- At least 5 stages required
- Bag or cartridge filtration recommended
- Cleaner selection important

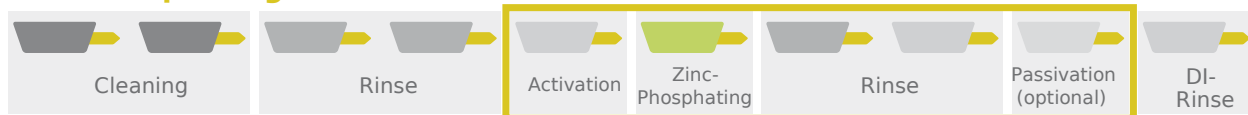
Process Parameters

- 15 – 45 °C (60 – 115 °F) bath temperature
- pH 3.8 – 4.8
- 45 to 240 sec. treatment time

Process Comparison - OXSILAN® vs. Zinc-Phosphating

Metal surfaces must be thoroughly cleaned prior to coating with OXSILAN®. Chemetall offers a full range of suitable cleaners. Thorough rinsing with deionized water prior to the application of OXSILAN® is essential in order to prevent contamination of the OXSILAN solution.

Zinc-Phosphating



OXSILAN®



Salt Spray Test

Neutral salt spray test, 1,000 h

OXSILAN® 9810/1 + E-Coat + powder paint



Advantages at a glance

- Alternative multi-metal process replacing ZnPh and FePh
- Thin and functional coatings of 30 to 80 nm achievable
- Excellent corrosion resistance and paint adhesion
- Fewer process steps – requires no activation and passivation stages
- Operates at ambient temperature
- Simple waste water treatment (virtually no sludge,
- Easy drop-in solution
- Significant process cost savings achievable