

**Metal pretreatment with nanoceramic-based passivations or zircon passivations**

Application	Product	Product parameter	Product features	Your advantage	Your benefit
Degreasing before thin layer passivation (nanoceramic)	ESKAPHOR S 6780 Alkaline spray cleaner	Concentration: 2 - 3 %, pH (1%) = 12 Working temperature: 40 - 60 °C	Suitable for multi-metals No aluminium and zinc surface attack  In combination with ESKAPHOR EM 326 Degrease at 40 °C	Excellent degrease performance starts at 40 °C  Optimum degrease of different types of contaminants  Automatic dosing via conductance  Material-friendly cleaning (dimensional workpieces)	Lower operating costs in the low-temperature range (energy)
Degreasing before thin layer passivation (nanoceramic)	ESKAPHOR S 6783 Alkaline spray cleaner	Concentration: 2 - 3 %, pH (1%) = 11.5 Working temperature: 40 - 60 °C	Suitable for multi-metals Slightly aggressive on aluminium and zinc surfaces  In combination with ESKAPHOR EM 326 Degrease at 40 °C	Excellent degrease performance starts at 40 °C  Optimum degrease of different types of contaminants  Automatic dosing via conductance  Improved paint adhesion on aluminium and zinc through low pickle impact	Lower operating costs in the low-temperature range (energy)

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<p>Pretreatment before painting</p>	<p>ESKAPHOR Z 2000 C Zircon phosphating</p>	<p>Concentration: 1 - 2 %, pH (1%) = 5.0 - 5.5 Working temperature: 35 - 45 °C</p>	<p>Suitable for multi-metals, Low-phosphate</p> <p>Degreasing and conversion layer formation</p> <p>Forms only small amounts of sludge during application</p>	<p>Low temperature range</p> <p>Low phosphate load in flush and wastewater</p> <p>Reduced flush water quantity, low consumption</p> <p>Short treatment times</p> <p>Automatic dosing via pH value</p>	<p>Lower operating costs (energy, water, maintenance, consumption)</p> <p>Higher surface throughput possible</p> <p>In general better corrosion protection than iron phosphating</p>
<p>Pretreatment before painting</p>	<p>ESKAPHOR Z 1100 C Thin layer passivation (nanoceramic)</p>	<p>Concentration: 1-2 % pH (1%) = 5.0 - 5.5 Working temperature: approx. 25 °C</p>	<p>Suitable for multi-metals, Low-phosphate, Preliminary degreasing required</p> <p>Forms only small amounts of sludge during application</p>	<p>Room temperature</p> <p>Low phosphate load in flush and wastewater</p> <p>Low consumption, short treatment times</p> <p>Automatic dosing via pH value</p>	<p>Lower operating costs (energy, maintenance, consumption)</p> <p>Higher surface throughput possible</p> <p>In general better corrosion protection than iron phosphating with passivation</p>

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<p>Pretreatment before painting</p>	<p>ESKAPHOR P 355 Passivating agent</p>	<p>Concentration : 0.15 - 0.25 %, pH (0.2%) = 4.0 - 4.5 Working temperature: approx. 25 °C</p>	<p>Suitable for multi-metals, Low-phosphate, Preliminary degreasing required  Post-misting with VE water is sufficient  Forms only very small amounts of sludge during application</p>	<p>Room temperature  No phosphate pollution in wastewater  Low consumption, short treatment times  Automatic dosing via pH value</p>	<p>Lower operating costs (energy, maintenance, consumption)  Higher surface throughput possible  In general better corrosion protection than iron phosphating with passivation</p>
<p>Improved corrosion protection of thin layer passivation (nanoceramic)</p>	<p>ESKAPHOR P 400 NR Passivating agent</p>	<p>Concentration : 0.15 - 0.25 %, pH (0.2%) = 4.0 - 4.5 Working temperature: approx. 25 °C</p>	<p>Suitable for multi-metals, Low-phosphate  Forms only very small amounts of sludge during application  No rinse</p>	<p>Room temperature  No phosphate pollution in wastewater  Low consumption, short treatment times  Easy cascade management  Automatic dosing via pH value</p>	<p>Improved corrosion protection</p>