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www.sanalsalt.com

Sanal® Pharma

Salt in its purest form for pharmaceutical industry, medicine,
cosmetic, food & health products



www.akzonobel.com

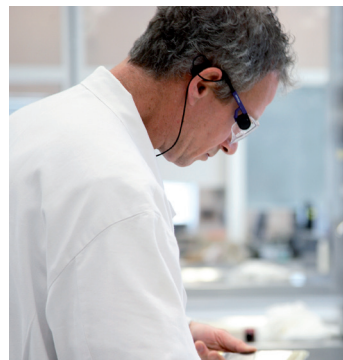
AkzoNobel is a leading global paints and coatings company and a major producer of specialty chemicals. Calling on centuries of expertise, we supply industries and consumers worldwide with innovative products and sustainable technologies designed to meet the growing demands of our fast-changing planet. Headquartered in Amsterdam, the Netherlands, we have approximately 46,000 people in around 80 countries, while our portfolio includes well-known brands such as Dulux, Sikkens, International, Interpon and Eka. Consistently ranked as one of the leaders in the area of sustainability, we are committed to making life more liveable and our cities more human.

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Sanal® – when only the purest will do...



When life depends on purity of salt ...

Sanal® Sodium Chloride Pharmaceutical Quality is the right choice. We are committed to purity our customers can rely on. Salt in its purest form and without additives plays an essential role in the pharmaceutical industry, in the manufacture of cosmetics, as well as medical and pharmaceutical products. Yet highly pure sodium chloride is also an indispensable component in chemical-technical applications and in the manufacture of laboratory chemicals. We guarantee that the manufacture and quality in our dedicated production facility for Sanal® meets the GMP-ICH Q7 guidelines. The FDA (Food and Drug Administration) accepted us to this effect in May 2011 and November 2014.

Sanal® – high and consistent quality
Sanal® products exceed the stringent requirements of monographs of the international pharmacopoeias Ph. Eur., USP, JP, KP, Ph. Rus, IP and Ch.P. We achieve this by using a dedicated production line. Manufacturing in all processing steps is subject to strict quality assurance and quality controls pursuant to the guidelines for the manufacture of pharmaceutical agents (GMP-ICH Q7). Sanal® products are free from bacterial endotoxins (non-pyrogenic).

Sanal® – unique product range
Where you have to rely on purity, Akzo Nobel Salt Specialties offers two qualities as API (Active Pharmaceutical Ingredient):

Sanal® P Sodium Chloride Pharmaceutical Quality is an active ingredient in both parenteral and peritoneal solutions and a base material for haemodialysis and haemofiltration solutions as well as other pharmaceutical applications.

Sanal® P+ Sodium Chloride Pharmaceutical Quality for specific market requirements as active ingredient like Sanal® P.



Sanal® P – Requirements

- Active pharmaceutical ingredients quality
- Certificate of Suitability (CEP 2008-105) – available for authorisation
- Free from bacterial endotoxins
- Highly pure sodium chloride without any additives
- Manufacture, quality management and analysis pursuant to the guidelines for the manufacture of pharmaceutical ingredients (GMP-ICH Q7)

Sanal® P – Application

- Suitable for the manufacture of parenterals
- Suitable for the manufacture of haemodialysis, haemofiltration, haemodiafiltration and peritoneal dialysis solutions

Sanal® P – Packing

Sanal® P is available in 25 kg LD-PE bags (40 x 25kg and 49 x 25kg)^{1,2}, in 1000 kg form-stable FIBC's with EURO pallet size¹ and loose in silo trucks. Other filling quantities and forms of delivery will be evaluated on request.

• Sanal® P – 25 kg LD-PE bag



Sanal® P+ (CN and RU) – Requirements

- Active pharmaceutical ingredients quality
- Free from bacterial endotoxins
- Meet the requirements of the monograph for the Russian and Chinese Pharmacopoeia
- Highly pure sodium chloride without any additives.
- Manufacture, quality management and analysis pursuant to the guidelines for the manufacture of pharmaceutical ingredients (GMP-ICH Q7)

Sanal® P+ (CN and RU) – Application

- Suitable for the manufacture of haemodialysis, haemofiltration, haemodiafiltration and peritoneal dialysis solutions
- Suitable for the manufacture of parenterals
- Suitable for use as fine chemicals
- Suitable for microelectronics
- Suitable for micro galvanic processes

Sanal® P+ (CN and RU) – Packing

Sanal® P+ is available in 25 kg LD-PE bags (40 x 25kg and 49 x 25kg)^{1,2}, in 1000 kg form-stable FIBC's with EURO pallet size¹ and loose in silo trucks. Other filling quantities and forms of delivery will be evaluated on request

• Sanal® P+ (CN and RU) – 25 kg LD-PE bag



- Extraordinary chemically pure free from bacterial endotoxins
- Active Pharmaceutical Ingredients – API
- Comply with the monographs of international pharmacopoeia Ph. Eur., USP, JP, KP, Ph. Rus., IP and Ch.P.
- Registered licenses for all main markets, including US DMF
- Sanal® P Sodium Chloride Pharmaceutical Quality – API quality
- Sanal® P+ Sodium Chloride Pharmaceutical Quality – API quality
- Dedicated manufacturing line and finishing area – FDA accepted
- Manufacturing based on GMP-ICH Q7 guidelines for API

¹ on heat-treated wooden pallets, comply with IPPC/ISPM 15

² each wrapped with flex net for stacking stability and covered with a protective cover.