Case Study

Laundry Bags: Trinity Healthcare

Background

Our Client

A local Trinity Healthcare site in Massachusetts, USA was approached by Aquapak Polymers Ltd to trial hot water-soluble laundry bags made from Hydropol™ to see how they compared with their current water-soluble bags. The bags were evaluated in multiple departments and in parallel by their contract laundry supplier. Following these successful trials, this site subsequently ordered its own supply of Hydropol™ laundry bags for use in their urgent care, OBGYN, adult medicine & pediatric departments.

The Laundry Bag

Hot water soluble (HWS) Hydropol™ has been specifically formulated for blown film and is an ideal polymer for the manufacture of laundry bags.

Results and Impact

Process streamlined with physical handling of laundry reduced

- Quicker and easier to open – they are easy to open straight from the box, even with one hand.
- Easy to see contents - excellent transparency with over 90% transmission rate when tested to ASTMD1003 verified to ISO 14782.
- Closed bags put directly into washing machines (no debagging; no need to open). Negates the occupational health and safety risks when there is heavily soiled, infectious or cytotoxic contents.
- No residue left on linen or clothes.

Number of bags used reduced

- No need to double bag due to strength, puncture resistance and durability.
- Hot water soluble at ≥70°C so can take damp or wet garments/laundry.

Reduced machine cleaning and maintenance

- Bag completely dissolves with no residue to remove from the machine.
- There is no plastic residue to dispose of or to potentially cause machine breakdown.

Technical Summary*

Barrier Properties – HWS Hydropol™ has high resistance to animal, mineral and vegetable oils, aliphatic and aromatic hydrocarbons, ethers, esters and ketones. They also offer excellent barriers to Oxygen.

Non-Toxic – HWS Hydropol™ is non-toxic and all raw materials are listed as approved as direct food additives and food contact by EU and US regulatory listings.

Biodegradable – HWS Hydropol™ is inherently biodegradable. Biodegradation has been observed by at least 20 different genera of bacteria and several yeasts and moulds which occur in activated sludge, compost, facultative ponds, landfills, anaerobic digesters and septic systems and in natural soil and aquatic environments. Sturm (aquatic) biodegradation tests show that the formulations degrade in the presence of activated sewage sludge at a similar rate to cellulose. Testing for Compostability and Anaerobic Digestion is ongoing.

Marine Safe – HWS Hydropol™ has shown no ecotoxicological effect in Marine environments according to ASTM D6691.

Anti-Static – Due to their high hydroxyl group content and hygroscopicity, Hydropol™ compounds are inherently static dissipative, similar to cellophane, and cause little frictional static charging. Surface resistivities are in the range of 105–106 ohms/m2.

**please see Hydropol™ 30124 Technical Data sheet for complete details*

Client feedback

"This (Hydropol™) bag is much easier to open up, has no odor when I opened the bag unlike my current bags that have a vinegar smell and super annoying to try and separate from itself.
Nurse, Trinity Healthcare, Massachusetts, USA

"They did exactly what they're supposed to do at 140 degrees (Fahrenheit), disappeared and passed the test!"
District Manager, Crown Uniform & Linen Service, CT, USA