

Ultra-Fresh KW-48

Ultra-Fresh KW-48 is an aqueous dispersion used in the treatment of textiles, plastics, polyurethane products and in the dry film preservation of paints, coatings, caulks/sealants and grouts to reduce the effects of microbial action such as odor generation, degradation or discoloration.

Ultra-Fresh KW-48 is based on the molecule zinc pyrithione. It is a broad spectrum, highly effective antimicrobial agent. Studies have shown that the active reacts with key proteins in a microbe's outer membrane, blocking transfer of necessary nutrients into the cell.

Articles treated with Ultra-Fresh KW-48 promise freshness, stain protection and extended product life. Formulated to provide excellent durability, Ultra-Fresh treated products continue to offer performance after multiple cleanings or extended exposure to environmental stresses.

Some examples of Ultra-Fresh KW-48 end uses:

Air mattresses
Athletic apparel
Bedding
Canvas
Carpets and rugs
Cubicle curtains
Fleece fabrics

Home textiles and upholstery
Inflatable boats
Ink and pigment dispersions
Laminated textiles
Mattress ticking
Medical textiles
Military tents and textiles

Natural leather
Outdoor patio upholstery
Personal floatation devices
Socks and hosiery
Rubber gloves
Shoe insoles
Shower curtains

Sleeping bags
Tents and awnings
Textile coatings
Towels
Undergarments
Uniforms
Wool fabrics



Ultra-Fresh KW-48



PRODUCT INFORMATION

Physical state	finely divided suspension
Appearance	off white
Particle size	<10 μ
pH (5% solution @25C/77F)	6.5 – 8.5
Solubility	dispersible in water
Active ingredient	48% zinc pyrithione
Volatile organic content	0%
Decomposition	>200°C/395°F
Treatment level (owg)	0.15-0.7%

PROCESSING CONDITIONS

Ultra-Fresh KW-48 can be applied by normal textiles processes, such as padding (foulard) and exhaustion. It can be applied with other finishes such as softeners in the same bath. No special drying or curing steps are required.

For polyurethane, coatings, paint, caulking/sealant and dried film applications, Ultra-Fresh KW-48 may be added at any time during the formulation procedure that will insure uniform distribution throughout the system.

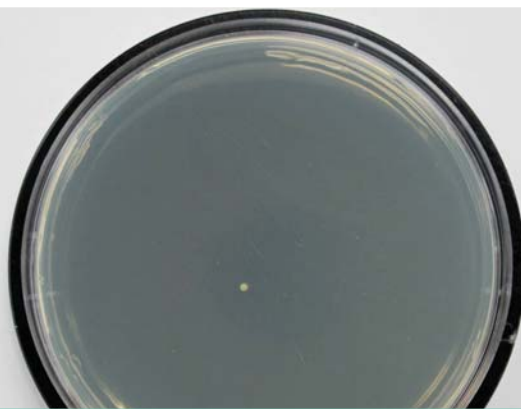
Please refer to the Ultra-Fresh KW-48 Technical Data Sheet for more detailed information.

REGULATORY APPROVALS

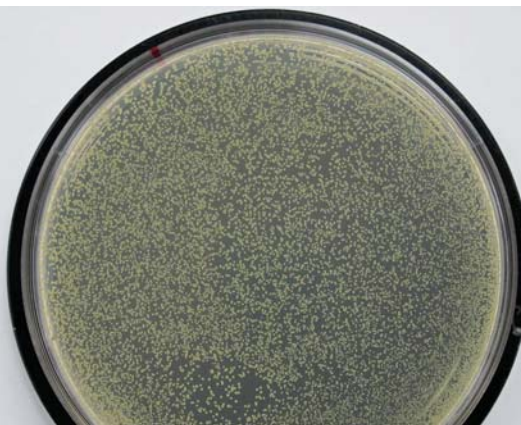
Ultra-Fresh KW-48 is EPA (USA) registered, BPR (EU) compliant and Oeko-Tex listed, and complies with all regulatory requirements of each country where it is sold.

Antimicrobial Efficacy

The antibacterial properties of Ultra-Fresh KW-48 may be measured using quantitative methods such as the ISO 20743 (JIS L1902) or ISO 22196 (JIS Z 2801). To test for antifungal properties, most fungal test methods, including AATCC Method 30 or ASTM G21 are suitable.



Bacterial recovery from treated article



Bacterial recovery from untreated article

Figure 1. Photos of bacterial recovery from cotton fabric tested using ISO 20743 (*Staphylococcus aureus*) to assess antibacterial activity.