

Ultra-Fresh KW-48

Ultra-Fresh KW-48 is an aqueous dispersion formulated as a broad spectrum, highly effective, antimicrobial treatment for textiles, plastics, polyurethane products and in the dry film preservation of paints, coatings, caulks, sealants and grout.

Based on the molecule zinc pyrithione, Ultra-Fresh KW-48 is designed to prevent odor generation, degradation and discoloration caused by microbial contamination in treated goods.

Even after multiple cleanings, Ultra-Fresh KW-48 continues to protect treated goods from microbial spoilage offering durable, built-in protection.

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
Nonwovens
Outdoor patio upholstery
Personal floatation devices
Socks and hosiery
Rubber gloves
Shoe insoles

Shower curtains
Sleeping bags
Tents and awnings
Textile coatings
Towels
Uniforms
Wool fabrics

Ultra-Fresh KW-48



PRODUCT INFORMATION

| | |
|------------------------------|---------------------------|
| Physical state | finely divided dispersion |
| Appearance | off white |
| Particle size | <10 μ |
| pH (5% solution) | 6.5-8.5 |
| Solubility | dispersible in water |
| Active ingredient | zinc pyrithione |
| Specific gravity (25°C/77°F) | 1.3 |
| Volatile organic content | 0% |
| Solvent carrier | water |
| Treatment level (owg) | 0.15-0.7% |
| Decomposition | >200°C/395°F |

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.

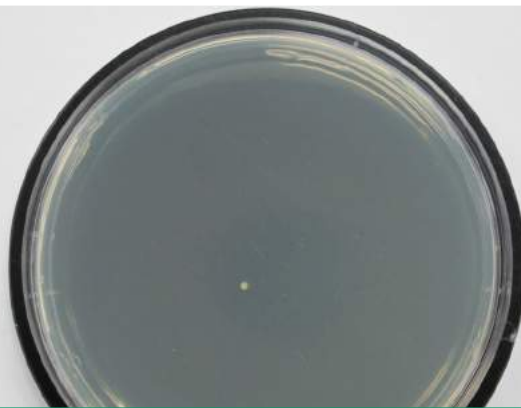
Please refer to the Ultra-Fresh KW-48 Technical Data Sheet for more detailed information.

REGULATORY APPROVALS

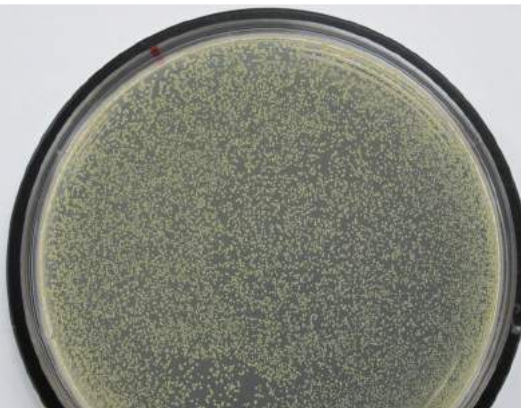
Ultra-Fresh KW-48 is EPA (USA) registered, BPR (EU) compliant and Oeko-Tex listed, and complies with all regulatory requirements of each country where it is sold.

Antimicrobial Efficacy

The antifungal properties of Ultra-Fresh KW-48 can be assessed using standardized fungal test methods such as AATCC Method 30 or ASTM G21. To test for antibacterial performance, quantitative methods such as the ISO 20743 (JIS L 1902) or ISO 22196 (JIS Z 2801) are recommended.



Bacterial recovery from Ultra-Fresh KW-48 treated article



Bacterial recovery from untreated article

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