

MYSTOLENE MK9

Textile Auxiliary Product Data

Function	Water-repellent for textiles.												
Composition	Wax emulsion with zirconium salts.												
Description	Free-flowing white emulsion with a slight acidic odour, readily dispersible in cold water. Possesses good freeze/thaw stability. Unstable under alkaline conditions.												
	<table> <tr> <td>Total Solids</td> <td>27.5%</td> <td>nominal</td> </tr> <tr> <td>Specific Gravity 15.5°C</td> <td>1.0</td> <td>approx.</td> </tr> <tr> <td>pH</td> <td>4</td> <td>approx</td> </tr> <tr> <td>Ionic nature</td> <td></td> <td>cationic</td> </tr> </table>	Total Solids	27.5%	nominal	Specific Gravity 15.5°C	1.0	approx.	pH	4	approx	Ionic nature		cationic
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Suggested Uses	Applicable to natural and synthetic fibres, particularly cotton and cotton polyester rainwear, cotton, polyamide and regenerated cellulose linings, polyamide umbrella cloths, light/medium weight cotton and acrylic tentage, knitted synthetics for sportswear, wool and wool/synthetic blends, non-wovens.												
Concentration	Since there will be a considerable variation in wet pick-up according to the type and weight of fabric and the equipment used it is possible to give only a general guide based on an average figure (see table on next page). Where the wet pick-up differs significantly from the quoted figure, adjustment of the concentration will be necessary.												
Durability	Mystolene MK9 has some durability to washing on polyamides. On cotton and cotton/polyester blends the resistance to washing is minimal but in combination with certain resins this can be enhanced considerably. Mystolene MK9 is not fast to dry cleaning.												
Combined finishing	Mystolene MK9 may be combined with most thermosetting resins and catalysts (with the exception of phosphate types), certain handle modifiers and anti-slip agents. Specific information is available on request. Where a rot proofing or mildew proofing is also required, Mystolene MK9 may be used in conjunction with Mystox R.												
Cloth preparation	For optimum results the fabric should be free from sizes, fats, wetting agents and other auxiliaries and be in a neutral or slightly acid condition prior to proofing. Particular care in this connection should be paid to vat-dyed or reactive dyed fabrics. Wherever possible the use of nonionic wetting agents should be avoided. Anionic types are to be preferred and in any case fabrics must be rinsed very thoroughly before proofing.												
Application	Preliminary trials should be carried out to establish suitability of equipment and other auxiliaries used in processing. STIR WELL BEFORE USE.												

Pad application

Mystolene MK9 should be diluted with an equal volume of cold water and strained into the bath containing 1 g/l acetic acid (80%).

To obtain uniform treatment the fabric must be thoroughly wetted out. The application of heat or use of a volatile wetting agent such as industrial methylated spirits (I.M.S.) or isopropyl alcohol can be advantageous.

Substantive application

For fabrics in a neutral or slightly acid state the following procedure is recommended on conventional dyeing equipment.

Run the goods cold in as low a liquor ratio as possible. Acidify with 1-2 g/l acetic acid (80%) and run for 5 minutes before adding the Mystolene MK9. Continue processing for a further 25 minutes before taking the goods off the machine. Do NOT wash off after proofing. If the liquor ratio should exceed 15:1 processing should be carried out at temperatures up to 60 °C to aid exhaustion. Carbonized and other highly acid goods should be rinsed thoroughly and processed as above without the acetic acid. It is advisable to run the pieces in water for 5 minutes before adding the Mystolene MK9.

Drying

Dry at 100°C-130°C. No special curing or baking is required. For optimum results the fabric should be fully dry. Allow the fabric to condition before testing.

Stripping

If it is necessary to remove Mystolene MK9 for any reason, treat for 30-60 minutes at 70°-90°C in a bath containing

5 g/l oxalic acid

3 g/l Calgon®

2.5 g/l anionic detergent

rinse thoroughly to remove wetting residues.

Non-Wovens

Mystolene MK9 may be incorporated into certain resin binders used in the production of water-resistant non-wovens or applied as an after treatment by impregnation.

Handling

Mystolene MK9 is acidic in nature and care should be taken to avoid eye and skin contact.

For further information see product Safety Data Sheet.

Fabric Type	Wet Pick-up	Bath Concentration Mystolene MK9
Cotton and cotton polyester rainwear	60-70%	40-80 g/l
Cotton and regenerated cellulose linings	70-80%	40-60 g/l
Polyamide linings and umbrella cloth	40-50%	50-60 g/l
Cotton and acrylic tentage/awnings	60-80%	100-200 g/l
Knitted synthetics	o.w.o.f.	5-7%
Wool and wool blends	o.w.o.f.	3-5%
Non-wovens	o.w.o.f.	5-10%