

AEGIS[®] ADDITIVE

AEM 5772-5 ANTIMICROBIAL



FUNCTION

Broad spectrum antimicrobial liquid additive for fibers and fabrics.

APPLICATION

AEM 5772-5 ANTIMICROBIAL is a topical finish and its resultant efficacy and durability on textiles is dependent on a number of factors including the processing route, processing chemicals, substrate and other finishing auxiliaries present on the fabric. Application requirements may also vary depending on fiber type. Consult with your Microban[®] Technical Support representative to determine suitability of this product for your particular application.

PROPERTIES

- Provides broad spectrum microbial inhibition on treated fabrics
- Offers long lasting odor control and fabric protection
- Cost effective treatment for cellulosic fibers, blends and synthetics
- Presence can be determined in the plant using a dye retention test
- Suitable for most common textile processes

GUIDELINES FOR USE

- AEM 5772-5 ANTIMICROBIAL can be applied to textiles and fibers by various methods including pad, exhaust, spray or roll coating
- AEM 5772-5 ANTIMICROBIAL is applied to textiles at 1.5% - 14.4% on weight of the goods
- AEM 5772-5 ANTIMICROBIAL is **incompatible** with many **anionic** surfactants and finishing auxiliaries. Testing compatibility with other auxiliaries is recommended prior to application.
- AEM 5772-5 ANTIMICROBIAL must be cured onto the fiber to ensure durability

PAD APPLICATION

Polyester, Cellulosics, Blends

- Typical application level: 3.5%-11.0% AEM 5772-5 ANTIMICROBIAL on weight of fabric. Determine wet pick-up (wpu) of the fabric.
- Dilute AEM 5772-5 ANTIMICROBIAL to final pad bath concentration based on fabric wet pick-up. pH of the treatment bath should be between 4.5 – 6.0 adjusted with citric or acetic acid.
- Add any other finishing additives (softeners, moisture management agents, etc) to the treatment bath. thoroughly before use.
- Pad the fabric.
- Dry/cure the fabric, ensuring the fabric reaches 140°C - 160°C for 30-45 seconds.

TECHNICAL DATA

Chemical Characteristics	Quaternary silane compound
Active level	3.6% in water
Appearance	Clear, water-white to opaque white
pH value	3.0 to 6.0
Ionicity	Cationic
Water Solubility	Aqueous Micro emulsion

EXHAUST APPLICATION *Cellulosics*

Cotton and Poly/Cotton Blends

- Application levels: 5.0% - 11.0% AEM 5772-5 ANTIMICROBIAL on weight of fabric.
- Slowly meter AEM 5772-5 ANTIMICROBIAL into the jet during the exhaustion process to assure uniform coverage of the fabric. A minimum processing time of 30 minutes at 50°C is recommended.
- Consult Microban[®] Technical Support for additional assistance with exhaust applications.

Points to Note:

- The high affinity of AEM 5772-5 ANTIMICROBIAL for cotton means it is necessary to control the application conditions carefully to ensure a level application on the fabric.
- It is important to remove residual anionic residues from bleaching and dyeing as they will interfere in the exhaust process and performance of the product
- Softening. If post softening is required, any softener should be applied after the application of AEM 5772-5 ANTIMICROBIAL. Any softener used should be cationic or non-ionic in nature. They may be applied from the same liquor using the method recommended below.

Recommended Process Route:

- Soft Flow Washing
- Exhaust application of AEM 5772-5 ANTIMICROBIAL Exhaust application of softener in same bath
- Hydro extract
- Tumble dry / Stenter dry

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EXHAUST APPLICATION METHOD

100% Cotton or Cotton Rich Blends

- Run a 10 minute hot rinse of the fabric (50°C)
- Run a second 10 minute hot rinse of the fabric (50°C) Run a 5 min cold rinse of the fabric Refill the jet cold at a liquor ratio of 1:10
- Adjust temperature to 20-30°C Set bath at pH 4.5 - 5.5
- Run 2 mins
- Add required amount of activated AEM 5772 slowly to jet over 2 minutes Run 5 mins
- If softening, add softener
- Run 5
- Raise temperature at 1°C per min to 50°C (118°F) Run 30 mins
- Drain, and unload without rinsing Dry fabric at approximately 140°C

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