

Moth and beetle-proofing agent for the treatment of wool and wool blends, feathers and animal hairs

Properties and fields of application

- Highly effective against
 - o *Tineola bisselliella* (Cloth moth)
 - o *Tinea pellionella* (Case bearing clothes moth)
 - o *Tinea translucens* (Case bearing clothes moth)
 - o *Anthrenus flavipes* (Furniture carpet beetle)
 - o *Attagenus piceus* (Black carpet beetle)
 - o *Attagenus pellio* (Furriers beetle)
- Wool treated with EULAN[®] SPA 01 as instructed in the guide recipes meets the requirements set by the Woolmark Company, GuT and Wools of New Zealand
- High fastness to washing and dry cleaning
- Good bath exhaustion
- Does not have increased affinity for polyamide in blends with wool
- Good heat stability
- Can be eliminated in waste water treatment plants

General properties

Chemical basis	Preparation of permethrin (synthetic pyrethroid)
Ionicity	Nonionic
Form supplied	Light yellow liquid
Density (20°C)	1,0 g/cm ³
Dissolving	Miscible in any ratio in water
Viscosity (20°C)	approx. 50 mPa.s
pH of a 1% solution in water (23°C)	5,0 - 7,0
Stability	Good stability to acids and hard water. Stock solutions have limited stability and should therefore be stirred frequently. A highly alkaline pH causes hydrolysis.

Technical notes on application

General

EULAN[®] SPA 01 can be applied to wool in all make-up forms on all equipment commonly used in the wool industry. Experience to date has not shown any impairment of substrates treated with this product.

The product does not affect dyeing either in the same bath or if the finish is applied subsequently. It does not cause any change of shade or impair fastness properties.

Amounts required for wool and blends of wool and other fibers

0,12- 0,4% EULAN[®] SPA 01 calculated on weight of goods, depending on the effect required and method of application.

Guide recipes

1. Exhaust process

0,12-0,25% EULAN[®] SPA 01

Liquor ratio	1:5-1:40
pH	2,0-6,5
Temperature	30-98°C (106°C)
Time	30-90 min

To maximize fastness properties and minimize the waste water load, the treatment temperature should not be below 60°C.

2. Blending process

In the blending process, treated and untreated wool are blended to protect the entire blend against moths and beetles.

The blending process is recommended instead of spraying, especially for dry-spun yarns (e.g. yarns where the spinning lubricant is not washed out).

This process can only be used if EULAN[®] SPA 01 is applied to the treated component using the exhaust process under dyebath conditions (blank dyebath). The amount of EULAN[®] SPA 01 required depends on the proportion of treated wool in the subsequent blend. Thorough blending of the treated and untreated components by blending/carding/teasing is essential.

Amount of EULAN[®] SPA 01 required for subsequent blending with untreated wool.

Example: 0,25% EULAN[®] SPA 01 on finished goods

<i>Percentage of treated wool in final blend (%)</i>	<i>Percentage of untreated wool in final blend (%)</i>	<i>Amount of EULAN[®] SPA 01 (%)</i>
100	-	0.25
75	25	0.33
50	50	0.50
40	60	0.63

4. Use of EULAN[®] SPA 01 in taxidermy and also in cleaning carpets

EULAN[®] SPA 01 is not recommended for these fields because the application methods normally used are not suitable to achieve the necessary fixation and consequently the desired properties are below standard.

Ecology/Toxicology

EULAN[®] SPA 01 is toxic to fish. However, this does not prevent use of the product providing it is applied as directed because:

- very low concentrations are used
- bath exhaustion is high
- the product can be eliminated in biological waste water treatment plants.

To prevent damage to aquatic organisms, residual liquors must not be discharged directly into surface waters. They must be diluted adequately and treated in a biological waste water treatment plant before discharge. In the case of heavily contaminated residual liquors, e.g. from continuous processes with a uniformly high concentration of the product, the active ingredient must undergo alkaline splitting before draining the treatment bath.

Process: pH 10- 12 (with caustic soda)

5-20 min at 60°C

These conditions ensure complete splitting of the product.

This product must be handled with care. Inadequately diluted EULAN[®] SPA 01 must never be allowed to enter the drainage system. Empty containers should be rinsed with large quantities of water. The water used to rinse the containers should be added gradually to the treatment bath.

Storage stability

24 months from delivery ex plant TANATEX Chemicals in closed containers.

Note on safety

Information on handling and ecological and toxicological behavior is contained in the safety data sheet for EULAN[®] SPA 01.

Use biocides safely. Always read the label and product information before use.

Specifications

For further details, please refer to the product specification for EULAN[®] SPA 01.

General note on product designations

Under statutory regulation on occupational safety, environmental protection and transportation, all changes to the composition of products must be indicated.

Changes are indicated by adding numbers to the product designation, e.g. 01, 02, etc. They do not alter the technical properties of the product.

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