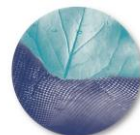




Gammacolor s.r.l.  
Via Zeuner, 5 20822 Seveso (MB) Italy  
tel. +39 0362550550 fax +39 0362551915  
email info@gammacolorsrl.com



Associazione Tessile e Salute  
Azienda associata

p.IVA 00736390964 C.F. 02639210158 c.c.i.a. Milano n. 927455 Codice ISS azienda 00736390964

## GAMMA HUV

Hydrophilic cationic softener for anytype of textile fibre.

Provides extremely softness and highhydrophility.

Provides ozone-fade resistance, colourfastness to nitrous oxides, and UV protection to the treated fabrics. Applicable by both exhaustion andpadder.

**Chemical nature:** Quaternary fatty ester compounds.

**Appearance:** Yellow opaque liquid.

**Storage:** Practically unlimited at temperatures between 10 and 40°C (At least 12 month).  
When frozen, it can be recovered by heating while stirring without changing the product quality.

### Properties

**Density:** 1.0 g/ml at 20°C

**pH:** 4 – 6 at 5% in water at 20°C

**Solubility:** Water dispersible at any concentration.

**Ionicity:** Cationic.

**Stability:** Stable to hard water, acids and diluted alkalis. Stable to oxidation. Good thermal stability.

**Compatibility:** It is compatible with all non-ionic and cationic products used in the textile industry.

**Ecology:** is highly biodegradable. Above 70%. APEO free.

### Properties & Effects

is a cationic softener, based on fatty compounds, with high hydrophilic properties.  
Applicable to all fibres, knit goods and fabric.

### UV protection

Ultraviolet (UV-B) rays from the sun harm human skin. These doses accumulate throughout our life and favor the appearance of skin cancer. The protection provided by fabrics is very often not enough to prevent the development of melanomas. A special finish, however, increases this protection effect significantly.

### Yellowing of indigo dyed denim

One of the most important problems of the indigo dyeing is the yellowing due to the reaction between the ozone and the indigo dye, and the use of inadequate cationic softeners.  
GAMMA HUV is a cationic softener that prevents yellowing and discoloration by ozone.

### Hidrophility



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Provides high hidrophility to all softened goods. Thanks to its high hidrophility, it is a good electric conductor. Providing very good antistatic effect on synthetic fibres.

### **Handle**

In case of cotton goods, it returns the original handle lost due to pre-treatment and bleaching operations.

Provides treated fabrics a handle:

- Very soft
- Smooth
- Natural
- High hydrophility

GAMMA HUV with respect to the classical compounds of quaternary ammonium:

- UV protection
- Ozone fade resistant
- Enhances colour fastness to nitrous oxides
- Very high re-wetting power compared to the hydrofugation of the classical cationic agents.
- Does not affect the dyeing rubbing fastness
- Prevents fabric degradation
- High exhaustion
- Non yellowing when dried at high temperature
- Does not affect the properties of the optical brightening agents (OBA)
- Use of catalyts not necessary
- Improves sewing ability
- Solvent free

### **Application methods**

It is applicable by exhaustion, padder or spraying technologies in tumbler.

### **Intermittent process (exhaustion)**

Thanks to its cationic character, can be applied in exhaustion processes.

No filtering problems in its application in packing equipments (cylinder, cross bobbin).

The exhaustion is highly controllable with the temperature. Fast exhaustion problems are removed by initiating the treatment at 20°C and rising until 40°C in 10 minutes.

Dosage 1 – 3 % o.w.f.

### **Application by Padder/Stenter**

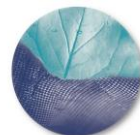
Dosage 15 – 50 g/l

Pick-up 50 – 90%

Drying at stenter 120°C (normal drying conditions)



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**Application by exhaustion in industrial garment machine.**

**Recipe:**

GAMMA HUV1.5 %

Liquor ratio: 1/15

pH: 5.5 to 6.5

20 minutes at 40°C

**Important**

When handling this product, it is important to consult the Safety Data Sheets at your disposal. As far we are concerned, the product has no health side effects. However, it is important to respect and follow the Safety Standards for handling chemical products.

Keywords: softener, cationic, hydrophilic, ozone, NOx, UV, ozone resistant, UV resistant, soft hand, smooth hand, natural hand.

The data shown are the result of accurate studies and / or experience gained, however, must be considered indicative and in any case without warranty for our use.

The data contained in this sheet are not to be considered specific.

For information : e-mail [info@gammacolorsrl.com](mailto:info@gammacolorsrl.com)