



esbelt **AM Belts** **Anti-Microbial & Anti-Biofilm**

Microbial growth reduced by over 99%.
Fully effective throughout the working life of the belt.
Food products or their composition are unaffected.
Contribute to better **HACCP** system management.

esbelt.com





esbelt AM Belts

The **esbelt AM antimicrobial belt** range represents a major aid for food companies in guaranteeing the safety of processed foods, especially when shelf life is a strategic property of the food item. Its main antimicrobial ingredient is not a bactericide but a bacteriostatic agent. Its function is to prevent the belt from adding to the microbial load of the conveyed product



ADVANTAGES

BENEFITS

Inhibition of biofilm formation.



MORE EFFECTIVE DISINFECTION.

Microbial growth reduced by over 99%. Highly effective against a wide spectrum of bacteria and other microbes, (such as *Staphylococcus aureus*, *Escherichia coli*, *Listeria monocytogenes* and *Salmonella enteritidis*).



IT IMPEDES CROSS CONTAMINATION and prevents the belt from becoming a focus of contamination. It offers **ADDITIONAL SECURITY IN AUDITS AND CONTROLS BY DISTRIBUTORS AND REGULATORS, REDUCING THE RISK OF COMPLAINTS AND RETURNS.**

Fully effective throughout the working life of the belt. Our innovative AM component is added to the belt formula itself so it continues to work even when the cover is worn, cracked or cut.



IT AVOIDS PREMATURE REPLACEMENT, RESULTING IN SAVINGS IN TIME AND MONEY.

Our AM component is not water soluble.



IT MAINTAINS ITS EFFICIENCY, MEETING THE STRICTEST CLEANING PROCEDURES.

Our active ingredient meets European and FDA standards for contact with food.



IT STRENGTHENS PREVENTATIVE MEASURES associated with HACCP.

Waterproof or impregnated fabrics.



BARRIER EFFECT AGAINST MOISTURE, LIQUIDS AND DIRT.

Our AM component meets current legislation on chemical migration.



It does not reduce the bacterial load of the conveyed product, but prevents the load from increasing due to contact with the belt. **The food product and its composition are unaffected.**



Main characteristics

- Conveyor and process belts with antimicrobial properties
- Excellent resistance to vegetable oils and fats
- Excellent longitudinal flexibility (knife-edges)
- FDA certificate, EU regulation 1935/2004 food quality and EU regulation 10/2011.
- Very competitive price

Report: Poultry processing plant

BELT TYPE	Application	Test time*	Bacterial growth results
CLINA X 08UFMT AM	Chicken breast conveyance	13 h/day, 5 days/week 7 months	Staphylococcus aureus: 99,79 % reduction Escherichia coli: 99,69 % reduction **Listeria monocytogenes: 99,97% reduction

* Each day a strict detergent and disinfection protocol is applied to the belt. Regular microbiological checks on the belt bacterial load by an external lab.

** Results obtained after two months' of testing.

TEST METHOD

Specific conditions in each company make on-site checks on belt antibacterial effectiveness advisable. RODAC plates, surface swabs or similar are very practical methods for use in factories but a degree of randomness cannot be avoided in the results. In addition, biofilms cannot be detected by techniques that are unable to remove them. For this reason **esbelt** recommends occasional tests on samples of used belt by an external lab with experience in applying the standards ISO 22196 (international), ASTM E 2149 (American) and JIS Z 2801 (Japanese). To ensure antimicrobial efficacy (and not cleaning) is tested, **esbelt** recommends that the test belt include an AM and a non-AM section, comparing samples from both sections.





esbelt recommends cleaning its belts with **wasb**[®] a highly effective detergent for eliminating a wide range of fats, oils and dirt in general.

Guideline cleaning protocol

The recommended application protocol, whether daily or for special cleaning, is:

- Step 0 - Clean while dry to remove solid waste, if necessary.
- Step 1 - Rinse the surface with water.
- Step 2 - Apply **wasb** diluted in water at 45-55°C, at a dose of 3-4%.
- Step 3 - Leave to act for 15-20 minutes.
- Step 4 - Rinse with abundant water, avoiding high pressures.
- Step 5 - Apply the normal disinfectant.
- Step 6 - Rinse for the last time with water.



esbelt Group companies:

● **Esbelt, S.A.**

Provença, 385
08025 Barcelona
Spain
Tel. +34-93 207 33 11
Fax + 34-93 207 13 63
www.esbelt.com
spain@esbelt.com

Esbelt GmbH

Habichtweg 2
41468 Neuss
Germany
Tel. +49-2131 9203-0
Fax +49-2131 9203-33
www.esbelt.de
info@esbelt.de

Esbelt SAS

Parc d'activités de Taure
31880 La Salvetat St-Gilles
France
Tel. +33-5 61 06 89 10
Fax +33-5 61 06 89 11
www.esbelt.fr
esbelt@esbelt.fr

Esbelt Trading Inc.

7 Winter Forest Court
O'Fallon, MO 63366
USA
Tel. +1-636 294 2267
Fax +1-636 294 2268
www.esbelt.us
esbelt@esbelt.us

Esbelt ApS

Agerhatten 16B - Indgang 2
DK-5220 Odense SØ
Denmark
Tel. +45 70 20 62 09
Fax +45 66 12 62 09
www.esbelt.dk
esbelt@esbelt.dk