





# Spotlight Gastrointestinal System

## Gastrointestinal System – Centre of Body & Health

**In this Spotlight** we focus on solutions for the gastrointestinal system. With our product portfolio and individual, application-related technical advice, we support you to develop contemporary dosage forms.

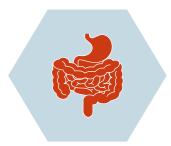
Being the centre of our body, the gastrointestinal system is a highly organised and sensitive network of different organs. While nutrition and digestion directly determine our well-being, they are not the only factors which cause stomach and intestinal problems and thus have impacts on our immune system. Complaints can vary from stomach pains to foam building, heartburn, dyspepsia and constipation.

With the active pharmaceutical ingredients (APIs) from our suppliers DuPont, Avesta and Omya we offer highly effective solutions for treating these symptoms.

COUPOND Simethicone Compounds & Emulsions		Contact us!	
AVESTA PHARMA PVT. LTD. Macrogol (PEG)			

## Liveo<sup>™</sup> Simethicone Compounds and Simethicone Emulsions





**Silicones** have a history of more than 50 years of safety and efficiency in healthcarerelated applications and polydimethylsiloxanes are globally recognized both for their proven biocompatibility and for being one of the most tested materials for their safety. Silicones are used in many different registered pharmaceutical products. Silicones are well known for their use as antifoams to control or eliminate foam, and the use of simethicone in gastroenterology is well established. Simethicone Compounds, a blend of polydimethylsiloxane and silicone dioxide, have been specifically designed for use in medical and pharmaceutical applications requiring foam suppression or inhibition. Simethicone Emulsions are normally highly effective and versatile silicone defoamers

which can be used as supplied or further diluted with water. Both are used as excipients, active pharmaceutical ingredients and process aids in pharmaceutical applications. To assure consistent quality for use as pharmaceutical ingredients, Liveo<sup>™</sup> brand antifoam products are manufactured, packaged, and tested at the Healthcare Industries Material Site utilizing US FDA GMP guidelines for Active Pharmaceutical Ingredients (APIs).

## Product Profile: Simethicone and Emulsion

Product	Description	Typical Application	Regulatory Status
Q7-2243 LVA, Simethicone USP	Silicone antifoam Low volatile	Foam conrtol in medical and pharmaceutical applications Prescription/ OTC/ medical device antiflatulents	Simeticone EP Certificate of Suitability (CEP) Simethicone USP, US-DMF
Antifoam M Compound			Simeticone EP Certificate of Suitability (CEP)



OUPONT>

## Avesta Polyethylene Glycol (PEG)/ Macrogol



**Polyethylene Glycol (PEG),** as a pharmaceutical substance well known under the name **Macrogol**, is used as an osmotic-type laxative to treat constipation or to clear the colon before coloscopy. Macrogol is the international non-proprietary name determined by the World Health Organization (WHO). Polyethylene glycols are polymers of ethylene oxide with the following chemical structure:

#### **HO-[CH2-CH2-O]**<sub>n</sub>-**H** n: average number of EO-units

Within the pharmaceutical industry the number included in the names of polyethylene glycols indicates the average molecular weight. Macrogol 3350 / Macrogol 4000, widely used as active ingredients, have the ability to bind a defined amount of water, which is transmitted immediately into the large intestine. There it softens the faeces and increases its volume, which leads to a stimulation of intestinal peristalsis and increases the number of bowel movements.

### Product Profile: Polyethylene Glycol / Macrogol

Product	Description	Typical Application	Regulatory Status	
Macrogol 3350	Palvethylana (hvad (DEC)	Active for laxatives	Polyethylene Glycol, PEG USP/ USP-NF Macrogol EP/BP Certificate of Suitability (CEP)	
Macrogol 4000	Folyeuryiene Glycol (FEG)		Good Manufacturing Practice (ICH Q7 Regulatory Dossier (EDMF)	

### Contact

#### Isabell Pallesche

Product Manager Pharma Tel: +49 40 32008-620 i.pallesche@biesterfeld.com

#### Gitte Hobbeling

Product Manager Pharma Tel: +49 40 32008-744 g.hobbeling@biesterfeld.com

### Imprint

#### Published by:

Biesterfeld Spezialchemie GmbH – HealthCare Ferdinandstrasse 41 20095 Hamburg

Phone: +49 40 32008-0 Fax: +49 40 32008-696 healthcare@biesterfeld.com www.biesterfeld.com

Registered Office: Hamburg, Commercial Register: AG Hamburg, HRB 66970, VAT-No. DE 196 930 661

#### Managing Director:

Peter Wilkes

Our raw material information, data and graphics were obtained from the records of our raw material suppliers. Local availability of products might differ from country to country.

#### Disclaimer:

We shall not be liable for the suitability of the goods for the purpose intended by Customer, unless the achievement of a certain outcome of the utilization was expressly incorporated into the contract. Our advice, information or recommendations regarding application shall be provided to the best of our knowledge. As the actual application is beyond our scope of influence, and as the circumstances of such application are not completely foreseeable, written and verbal indications, suggestions etc. can only be provided on a non-binding basis. They shall in particular not release Customer from the obligation to examine our products and goods for their suitability with regard to the intended processes and purposes.



#### **Biesterfeld Spezialchemie GmbH**

Ferdinandstrasse 41 20095 Hamburg Tel.: +49 40 32008-0 Fax: +49 40 32008-696 www.biesterfeld.com healthcare@biesterfeld.com

#### Publisher:

Biesterfeld Spezialchemie GmbH – HealthCare, Ferdinandstraße 41, 20095 Hamburg, Germany, Tel.: +49 40 32008-0, www.biesterfeld.com

#### Disclaimer:

We shall not be liable for the suitability of the goods for the purpose intended by Customer, unless the achievement of a certain outcome of the utilisation was expressly incorporated into the contract. Our advice, information or recommendations regarding application shall be provided to the best of our knowledge. As the actual application is beyond our scope of influence, and as the circumstances of such application are not completely foreseeable, written and verbal indications, suggestions etc. can only be provided on a non-bining basis. They shall in particular not release Customer from the obligation to examine our products and goods for their suitability with regard to the intended processes and purposes.

