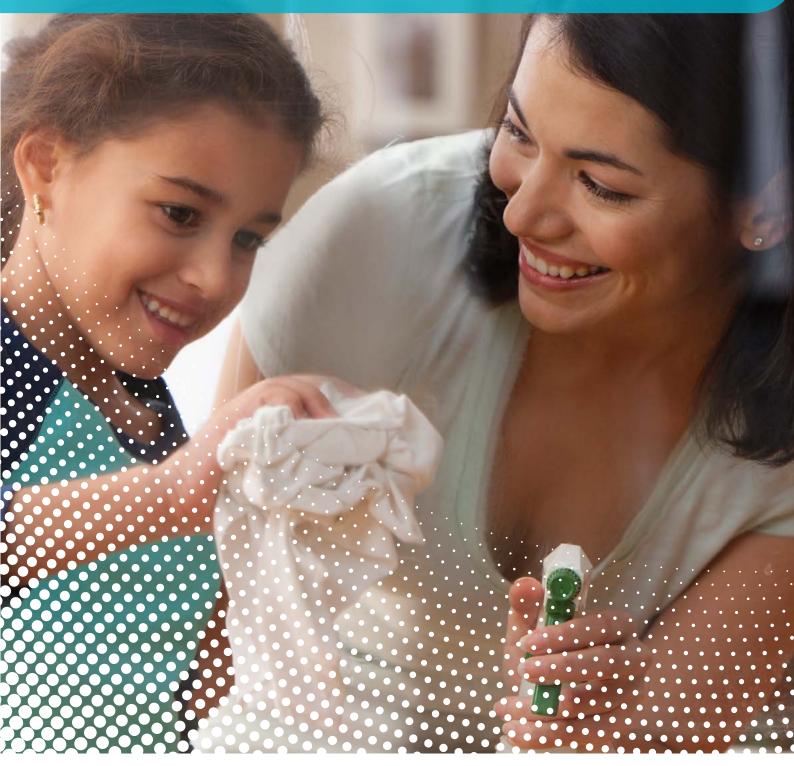


# Home care and I&I solutions

**INSPIRED BY NATURE** 



corbion.com/HomeCare

Corbion is a leading global manufacturer of natural L-Lactic Acid and Lactates. Our products are supplied to a variety of markets focused on natural food preservation, biobased chemicals and monomers for Poly Lactic Acid.

For the home and I&I industry, Corbion offers Lactic Acid and Lactic Acid derivatives. Corbion's products are highly effective and yet readily biodegradable therefore an ideal choice for environmentally safer and more sustainable scale removers and disinfectants.

## Corbion Home Care, Institutional & Industrial cleaning ingredients



#### 80 years of experience

The foundations of Corbion were laid in 1931 when Mr. Jansen established a Lactic Acid factory in Schiedam, the Netherlands. Corbion has 80 years of experience in the development, manufacturing and marketing of its products in a broad range of industries. Today Corbion is a global player in natural food preservation and biobased chemicals.



#### **Global presence**

Headquartered in the Netherlands, Corbion operates production plants in the USA, the Netherlands, Spain, Brazil and Thailand. With a global network of sales offices, we are always close by to help you with your application development.



#### **Biobased products**

Lactic Acid and Lactates are made from renewable resources such as sugar beet, sugar cane, corn and tapioca. Corbion stands for pure, and builds on this concept. We seek to use processes based on nature like fermentation, crystallization and filtration.

#### Sustainability and innovation

New products, processes and applications, improved product quality and production efficiency have always been important reasons for our continuous innovation efforts. Now, sustainability and a reduced carbon footprint have joined this list. Our innovation programs focus on renewable feedstock materials, minimizing use of auxiliary chemicals, reducing energy use, integrating green energy and replenishing nutrients into agricultural soil.

Product name	Surface care	Disinfectants	Laundry care	Manual dishwashing	Toilet care	Industrial	Institutional	
PURAC <sup>®</sup> Sanilac	~	~	~	~	~	~	~	
PURAC <sup>®</sup> 88T	~		~		~	~	~	
PURAC <sup>®</sup> 80	~		~		~	~	~	
PURASOLV®						~	~	

### Home care and I&I applications



### Home care and **I&I** solutions

- Multifunctional
- Effective
- Safe
- Easy to formulate
- Biobased readily biodegradable

### Antimicrobial

PURAC<sup>®</sup> Sanilac is Corbion's L(+) Lactic Acid used as an antimicrobial agent. It delivers outstanding antimicrobial benefits to a variety of cleaning and disinfecting products in home care, industrial and institutional applications. PURAC® Sanilac offers a wide range of antimicrobial efficacy in one single product with its dual action of antibacterial and antiviral properties. This level of effectiveness against so many types of both microorganisms makes PURAC® Sanilac an excellent choice for a wide variety of products.

Readily biodegradable and non-toxic to the environment and humans, PURAC<sup>®</sup> Sanilac has a GRAS (Generally Recognized As Safe) status and is a safe alternative to many traditional biocides. It does not sensitize skin.

PURAC<sup>®</sup> Sanilac is globally available. In the United States, it is registered as an active at the Environmental Protection Agency (EPA) under Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), and is also approved for the DfE (Design for the Environment) pilot program. In Europe, PURAC<sup>®</sup> Sanilac is noted for the following product types under the Biocidal Products Regulation (EU) No 528/2012: PT 1 PT 2, PT 3 and PT 4. It can therefore be used in registered disinfectant formulations as an active, according to our notification dossiers. PURAC® Sanilac is registered as a preservative for detergents with the Swedish Eco-label (Bra Miljöval).

#### Descaling and soap scum removal

PURAC® 88T is an optimal ingredient for the detergents industry. It is both an excellent descaling agent and a soap



scum remover, combining multiple cleaning benefits in one single ingredient. With buffering capacity, PURAC® 88T can also help stabilize formulations. A highly concentrated, L-Lactic Acid solution of 88% in water, PURAC® 88T is colorless, has a neutral odor and is readily biodegradable. PURAC® 88T is an environmentally friendly option in a market sector where sustainability is key.

#### **Biobased solvents**

PURASOLV® is a range of esters of L-Lactic Acid. They are clear, colorless liquids with a mild odor. Lactate esters are nontoxic, biodegradable, and have excellent solvent properties that can replace organic and halogenated solvents for a wide range of industrial and consumer uses. Current market applications in the detergent area include lactate esters as water-rinsable degreasers for industrial cleaning, wipe solvents, paint strippers and hand degreasers. Several PURASOLV® lactate esters are registered at the EPA under FIFRA as list 4A/4B inerts.

### Buffering

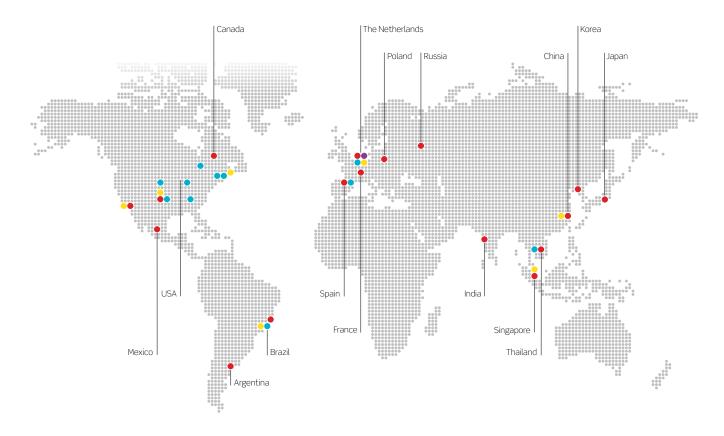
Buffers reduce the variation in the pH of products. pH Variation is detrimental to consistent product quality, product stability and shelf life. Lactic Acid is an excellent biobased buffer and can be used optimally as a buffering agent for detergent products with a pH value lower than 5.

#### Let us know how we can help you

At Corbion, we are proud of our ability to develop sustainable and biobased ingredient solutions in partnership. Whether your requirements are focused on microbial control, cleaning and descaling, or product stability, connect with us to find the natural solution for you.

ial solution						
Antimicrobial	Descaling	Soap scum removal	Buffering	Solvent cleaning	Degreasing	
~	~	~	~			N.
	~	~	~			. 0
	~	~	~			
				~	~	
	Antimicrobial		AntimicrobialDescalingSoap scum removal✓✓✓✓✓✓✓✓✓	AntimicrobialDescalingSoap scum removalBuffering✓✓✓✓✓✓✓✓✓✓✓✓	AntimicrobialDescalingSoap scum removalBufferingSolvent cleaning✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓✓	AntimicrobialDescalingSoap scum removalBufferingSolvent cleaningDegreasing </td

## Let us know how we can help you



#### Corbion Headquarters Corbion Production Location Corbion Sales Office Corbion Innovation Center

#### corbion.com/contact

#### Corbion in Home Care

For the home and I&I industry, Corbion offers Lactic Acid and Lactic Acid derivatives. Corbion's products are highly effective and yet readily biodegradable therefore an ideal choice for environmentally safer and more sustainable scale removers and disinfectants.

#### About Corbion

Corbion is the global market leader in lactic acid, lactic acid derivatives, and a leading company in emulsifiers, functional enzyme blends, minerals, vitamins and algae ingredients. We develop sustainable ingredient solutions to improve the quality of life for people today and for future generations. For over 100 years, we have been uncompromising in our commitment to safety, quality, innovation and performance. Drawing on our deep application and product knowledge, we work side-by-side with customers to make our cutting edge technologies work for them. Our solutions help differentiate products in markets such as food, home & personal care, animal nutrition, pharmaceuticals, medical devices, and bioplastics. In 2016, Corbion generated annual sales of  $\in$  911.3 million and had a workforce of 1,684 FTE. Corbion is listed on Euronext Amsterdam.



Interested in solutions for Home Care? Go to corbion.com/HomeCare

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