

Chlorhexidine's versatility makes it suitable for a wide range of markets and pharmaceutical products.

ANTISEPTICS	COSMETICS	DISINFECTION	ORAL HYGIENE	VETERINARY
Contact lenses	Deodorant lotion	Surfaces	Mouth washes	Teat dips
Wound dressing	Antibacterial soap	Gloves	Toothpaste	Wound dressing
Hand & skin	Roll on	Clothes	Throat tables	
Surgical scrub	Cream	Textiles		
Central catheter	Eye make-up remover			
Wipes				

#### EVONIK'S CHLORHEXIDINE AT A GLANCE

- Evonik's chlorhexidine products meet the requirements of GMP, CEP, CosIng & BPR.
- Evonik manufactures CHD digluconate in line with strict GMP conditions in Germany. This ensures a consistently high-quality product, with low levels of impurities.
- Due to its high effectiveness and versatility, SOVIDINE™ has become a highly respected antibacterial substance throughout the global health-care industry.
- Evonik is an experienced manufacturer of CHD, and has a deep understanding of its properties. This extensive expertise is invaluable to customers wishing to develop new products.
- SOVIDINE™ is the gold standard for antiseptics and disinfectant in the pharmaceutical area.
- When it comes to CHD, Evonik is a manufacturer you can truly trust.

This information and any recommendations, technical or otherwise, are presented in good faith and believed to be correct as of the date prepared. Recipients of this information and recommendations must make their own determination as to its suitability for their purposes. In no event shall Evonik assume liability for damages or losses of any kind or nature that result from the use of or reliance upon this information and recommendations. EVONIK EXPRESSLY DISCLAIMS ANY REPRESENTATIONS AND WARRANTIES OF ANY KIND, WHETHER EXPRESS OR IMPLIED, AS TO THE ACCURACY, COMPLETENESS, NON-INFRINGEMENT, MERCHANTABILITY AND / OR FITNESS FOR A PARTICULAR PURPOSE (EVEN IF EVONIK IS AWARE OF SUCH PURPOSE) WITH RESPECT TO ANY INFORMATION AND RECOMMENDATIONS PROVIDED. Reference to any trade names used by other companies is neither a recommendation nor an endorsement of the corresponding product, and does not imply that similar products could not be used. Evonik reserves the right to make any changes to the information and / or recommendations at any time, without prior or subsequent notice.

11/2016

**SOVIDINE™**  
An active pharma ingredient and effective antiseptic



## SOVIDINE™ – Chlorhexidine by Evonik

### ESSENTIAL MEDICINE WITH BROAD APPLICATION-ORIENTED BENEFITS.

Chlorhexidine (CHD) is listed as an essential medicine by the World Health Organization (WHO), and is respected throughout the global healthcare industry. Thanks to its high effectiveness and outstanding overall compatibility, CHD is suitable for use in both human and animal antiseptics.

### WHAT MAKES IT SO UNIQUE?

CHD and its salts are effective against a broad variety of bacteria, enveloped viruses and fungi. It is capable of inhibiting the growth of vegetative gram-negative and gram-positive bacteria. It has been shown that bodily fluids have practically no adverse impact on the microbiological efficacy of this antibacterial substance. Moreover, CHD can be used for the degradation of biofilm and can also prevent it from forming, in line with concentration and duration of exposure.

The most soluble CHD salt is **CHD digluconate**, which is an excellent choice for pharmaceutical formulations. In the medical industry, CHD formulations are used for surgical scrubs, to treat wounds, and to disinfect equipment, surfaces and textiles. And in the field of veterinary medicine, CHD is employed as a disinfectant for teat dips and wound dressings.

Importantly, a number of studies have proven that CHD is effective against antimicrobial-resistant bacteria – including wild types, mutant forms that typically occur in hospital environments, and superbugs such as MRSA that are resistant to traditional antibiotics.

In short, chlorhexidine is an extremely versatile and effective product – with a host of diverse real-world applications.

## Regulatory support & service

### THE FOUNDATIONS ARE FIRMLY IN PLACE FOR YOU TO START USING SOVIDINE™ IN YOUR OWN PRODUCTS.

SOVIDINE™ products meet the requirements of the latest version of the European Pharmacopoeia, and have been registered and approved for use for the three most common CHD applications: active pharmaceutical ingredients (APIs), cosmetics and biocides.

In terms of **APIs**, Evonik was one of the first companies to register CHD for the treatment and prevention of diseases. The company holds the following registrations for its CHD products within the scope of API applications:

#### API applications

	API (PH. EUR.)	BIOCIDE (BPR)	COSMETIC
<b>Registration/Information</b>	<ul style="list-style-type: none"><li>• GMP (Good Manufacturing Practice)</li><li>• CEP (Certificate of suitability of monographs of the European Pharmacopoeia) issued No.R1-CEP 2001-343 Rev 03</li><li>• DMF (Drug Master File) issued 1990 No.8379.</li></ul>	<ul style="list-style-type: none"><li>• Evonik has submitted the dossier for chlorhexidine digluconate for three product types:</li><li>• <b>Product type 1:</b> Human hygiene biocidal products</li><li>• <b>Product type 2:</b> Private area and health are disinfectants</li><li>• <b>Product type 3:</b> Veterinary hygiene biocidal products</li></ul>	<ul style="list-style-type: none"><li>• CHD has also been registered in the CosIng (Cosmetic Ingredient Database).</li><li>• This means that it can be used in cosmetics as a preservative with a maximum concentration of 0.3%.</li></ul>

Finally, CHD can also be used in **biocide** applications. Evonik was one of the very first manufacturers to register its CHD products with the European Chemicals Agency (ECHA). Correspondingly, Evonik is included in the list of active substance manufacturers under Article 95 of the ECHA Biocidal Products Regulation (BPR).

As of September 1, 2015, biocidal products may only be made available on the EU market if the source of the active substance (manufacturer or importer) is included on this list. The path is clear for you to leverage SOVIDINE™ for biocide applications.

## Specific applications

### WITH ITS SOVIDINE™ PRODUCTS, EVONIK IS ADDRESSING ESPECIALLY THE NEEDS OF THREE PRINCIPAL APPLICATIONS – WITH EACH MAKING FULL USE OF CHD'S ANTISEPTIC PROPERTIES:

#### VASCULAR ACCESS APPLICATIONS

Evonik CHD products are suitable for vascular access applications, such as central venous catheters (CVCs) and peripherally inserted central catheters (PICCs), and can also be used as surgical lubricants. For example, PICCs can be impregnated with CHD.



#### WOUND CARE

Diluted CHD solutions can be used to disinfect (clean out) wounds. CHD digluconate solutions are suitable for the disinfection of wound dressings (impregnated dressings).



#### PRE-OPERATIVE TREATMENT

CHD digluconate is particularly suitable for use in pre-operative scrubs, with the goal of reducing the spread of diseases in hospitals. CHD is able to effectively eliminate pathogenic bacteria from the items being treated.

