



**BULLETIN VC-5685-1**

**s&m phenoxyethanol Rch preservative**

single active ingredient and suitable for leave-on, rinse-off, wet wipes and sensitive applications

<p><b>product benefits</b></p> <ul style="list-style-type: none"> <li>o good bactericidal effect</li> <li>o vapor phase activity</li> <li>o stable to hydrolysis, temperature and pH</li> <li>o fully effective in anionic, cationic and non-ionic systems</li> <li>o cost effective</li> </ul>	<table border="1"> <thead> <tr> <th data-bbox="1023 506 1266 546">INCI declaration</th> <th data-bbox="1315 506 1445 546">CAS No</th> </tr> </thead> <tbody> <tr> <td data-bbox="1023 546 1266 588">Phenoxyethanol</td> <td data-bbox="1315 546 1445 588">122-99-6</td> </tr> </tbody> </table>	INCI declaration	CAS No	Phenoxyethanol	122-99-6
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**technical product properties**

color	colorless
form	liquid
odor	characteristic
density (20 °C)	1.103 - 1.108 g/ml
boiling point/boiling range	245 °C
flash point	126 °C
viscosity (20 °C)	ca. 41 mPa*s
water solubility (20 °C)	24 g/l
foaming characteristics	non foaming
vapor pressure	< 0.01 hPa
natural ingredient acc. ISO 16128	0%

**formulation guidelines**

recommended use levels <sup>1)</sup>	0.5 - 1.0 %
general information	S&M phenoxyethanol Rch preservative is fully effective both in anionic as well as cationic systems. Effective in pH ranges up to 12.
solubility(ies)	In water and non-polar solvents only limitedly soluble. To dissolve s&m phenoxyethanol Rch preservative in water, an agitator with good turbulence is necessary. In polar solvents readily soluble.
compatibility with surfactants	S&M phenoxyethanol Rch preservative proved to have good chemical compatibility with anionic surfactants such as sulphates, ether sulphates and sulphosuccinates, as well as with non-ionogenic surfactants. Ethoxylated surfactants may lead to loss of effectiveness.
compatibility with sulphite ions	S&M phenoxyethanol Rch preservative exhibits no interaction with sulphite ions.
recommended use pH range	< 12
maximum use temperature	> 100 °C



<sup>1)</sup> For the determination of the optimum dosage we recommend a preservation test, as the efficacy is highly influenced by the other ingredients of a finished formulation. The staff of Ashland's microbiological laboratories will be pleased to give customers the appropriate support.

## global approvals

use-concentration	leave-on	rinse-off	Recommended use-concentrations are based on average active content. Please pay attention to the corresponding certificate of analysis.
Ashland recommendation	max. 1.0 %	max. 1.0 %	
EU Cosmetics Regulation	max. 1.0 %	max. 1.0 %	
CIR (USA)	max. 1.0 %	max. 1.0 %	
ASEAN Cosmetic Directive	max. 1.0 %	max. 1.0 %	
TSSC 2015 (China)	max. 1.0 %	max. 1.0 %	
MERCOSUR	max. 1.0 %	max. 1.0 %	

## regional availability:

For country-specific availability please check [ashland.com](http://ashland.com) or contact your local sales representative.

## microbiological efficacy

S&M phenoxyethanol Rch preservative is equally effective against bacteria, yeasts and mould. For s&m phenoxyethanol Rch preservative to perform effectively in destroying organisms in products already contaminated, a minimum contact time of 48 hours is necessary. Good production hygiene, as well as the use of raw materials with low microorganism levels as a result of correct raw material control, are of course vital prerequisites for the production of microbiologically faultless finished products.

## MIC

The efficacy of the product has been tested against the following microorganisms according to VAH (Association for Applied Hygiene). Determination of the minimum inhibitory concentration in the serial dilution test produced the following values (MIC in % of the product):

bacteria (gram-negative)	MIC	bacteria (gram-positive)	MIC	yeasts	MIC
<i>Escherichia coli</i>	0.50	<i>Staphylococcus aureus</i>	1.00	<i>Candida albicans</i>	0.50
<i>Pseudomonas aeruginosa</i>	0.50			<i>Aspergillus niger</i>	0.50
				<i>Penicillium pinophilum</i>	0.25

## material compatibility<sup>2)</sup>

criteria	compatible	to be avoided
concentrate	stainless steel, brass, copper, zinc, aluminium, polyethylene, PVC (hard), ethylene-propylene-terpolymer (EPDM), polytetrafluoroethylene (PTFE)	polycarbonate (PC), polymethyl methacrylate (PMMA), acrylonitrile butadiene styrene polymer (ABS), sealants other than mentioned
aqueous dilution (1.0 %)	no significant difference to water	water incompatible materials

<sup>2)</sup> Compatibility has to be proved in each case.

## transport & storage

category	facts
dangerous goods	no
UN number	-
packaging group	
package sizes	25 kg, 230 kg, 1100 kg
shelf life	24 months
storage	Protect from frost, heat and sunlight. Store at room temperature in the original container.

More details regarding handling, toxicity and labelling are available in the Safety Data Sheet (SDS).