Product properties – Technical sheet



pH – VALUE		Item no.:	
MINUS		60 50 10	
Areas of application			
	pH – Value Minus is used to reduce the pH value of circulating water systems like in swimming pools, whirlpools, cooling systems and waste water systems.		
	Anticorrosive inhibitors guarantee protection for iron, steel and plastic parts.		
	Special ingredients are able to absorb water hardness.		
Method of application	In the range of pH 7.0 – 9.0 it is necessary to add 25 ml/m³ of pH – Value Minus to reduce the pH value for 1.0 pH. The optimum into swimming pools is between pH value 7.2 and 7.6. It is necessary to add small quantities of the product till the aimed pH value is reached. In case of manual dosing the product must be mixed very well with the water. Suitable for automatic dosing system (control according the pH value)		
Material compatibility			
	PVDF, PP, PE, PVC, glass		
	pH – Value Minus must not be used on steel, zinc, cast iron and stainless steel.		
	In addition, further material incompatibilities cannot be excluded. Therefore, test the product on an unimportant spot before its definite use.		

605010.docx 1

Status: 21st February, 2023

Product properties – Technical sheet



Analysis of concentration	see titration method			
Physical and chemical properties				
Aspect/colour	Colourless			
Form	Liquid			
Odour	Pungent			
Foaming behaviour (see under conditions of application)	Not foaming			
Phosphates	not applicable			
Density (20°C) g/cm³	1.070 – 1.090			
Concentration	1 % in H₂O dest.	3 % in H₂O dest.	5 % in H₂O dest.	
pH value (1 %, 20°C)	1.2 – 1.8	not applicable	not applicable	
Conductance (1 %, 20°C) mS/cm	16.5 – 19.5	47.0 – 53.0	77.0 – 87.0	
Phenolphthalein alkalinity (ml)	4.65 ± 0.35 (1 % at 10 ml sample)			
m-Value (ml)	not applicable			
Storage stability	- 5°C to + 40°C			
Remarks regarding biocides	not applicable			
Hazardous products	Hydrochloric acid			
Risk symbols		!		
		WARNING	·	
Special remarks	Always close the container with the original closure, and store the items in a cool area without solar radiation. Product which was taken out of the container must never be poured back into the container. Read in any case our safety data sheet before using the product!			
Disposal	Disposal acc. to official regulations, in case of doubt contact the manufacturer.			

Please refer to our safety data sheets and our operating instructions with regard to precautionary measures, first aid measures and storage. The information given in the Sheet corresponds to the present state of our technical knowledge and experience. They do not constitute any guarantee; they are to be considered as basic information only. In particular they do not guarantee particular properties or the suitability for a concrete purpose. Because of the multitude of possible influences during the application of our products, the user has to make in any case the relevant tests and take the corresponding precautions. Any existing intellectual property rights are to be observed.

605010.docx 2