

Starting Formulation, CL-9030

Jul 15th 2021
1/2

End-Use Homecare

Highly acidic toilet-cleaner with pH of 0.5

Utilized RHEOBYK-7420 ES

Sprayable, rinse off bathroom cleaner utilizing RHEOBYK-7420 ES to provide surface cling for a strong acid solution

Formulation

Pos.	Component	Supplier	Function	Weight [g]
1	Demineralized water		Solvent	80.0
2	Amido sulfonic acid		Acid	7.0
3	RHEOBYK-7420 CA (52%)	BYK	Rheology additive	3.0
4	Berol 260**	Julius Hoesch	non-ionic surfactant	2.5
5	methane sulfonic acid (70%)		Acid	4.0
6	phosphoric acid (75%)		Acid	1.5
7	Na-Cumolsulfonate		surfactant	2.0
				100.0

** Berol 260 is a narrow distribution range nonyl-undecanol (C9-C11) 4 EO 100%

Instructions

Mix water with the amino sulfonic acid and stir for 10 minutes at 2500 rpm with 30mm tooth blade (4 m/s) until the dispersion is dissolved.

Add the RHEOBYK-7420 ES and stir 5 minutes at 2200 rpm (3.5 m/s).

Incorporate the nonionic surfactant while stirring at 2200 rpm (3.5 m/s).

Slowly add the acids into the batch under stirring and continue for 10 minutes at 2200 rpm (3.5 m/s).

Finally, add the Na-Cumolsulfonate and stir for 5 minutes at 1600 rpm (2.5 m/s).

Characteristic Data/ Specification

Data	Unit	Value
pH value		0.5
Viscosity byko-visc Advanced EX L Spindle L 3 at 10 rpm	mPa-s	1900-2000
Viscosity byko-visc Advanced EX L Spindle L 3 at 100 rpm	mPa-s	500-550
Rheological additive solids	%	1.2
Solids	%	17%

Further information / Application

The formulation is designed to be used as is.

Spray the acid cleaner undiluted on bathroom surfaces, then rinse with water after 5 minutes.

ADD-MAX®, ADD-VANCE®, ADJUST®, ADVITROL®, ANTI-TERRA®, AQUACER®, AQUAMAT®, AQUATIX®, BENTOLITE®, BYK®, BYK®-DYNWET®, BYK®-MAX®, BYK®-SILCLEAN®, BYKANOL®, BYKETOL®, BYKJET®, BYKO2BLOCK®, BYKOPLAST®, BYKUMEN®, CARBOBYK®, CERACOL®, CERAFK®, CERAFLOUR®, CERAMAT®, CERATIX®, CLAYTONE®, CLOISITE®, DISPERBYK®, DISPERPLAST®, FULACOLOR®, FULCAT®, GARAMITE®, GELWHITE®, HORDAMER®, LACTIMON®, LAPONITE®, MINERAL COLLOID®, MINERPOL®, NANOBYK®, OPTIBENT®, OPTIFLO®, OPTIGEL®, POLYAD®, PRIEX®, PURE THIX®, RECYCLOBLEND®, RECYCLOBYK®, RECYCLOSSORB®, RECYCLOSTAB®, RHEOBYK®, RHEOCIN®, RHEOTIX®, SCONA®, SILBYK®, TIXOGEL®, VISCOBYK® and Y 25® are registered trademarks of the BYK group.

The information herein is based on our present knowledge and experience. The information merely describes the properties of our products but no guarantee of properties in the legal sense shall be implied. We recommend testing our products as to their suitability for your envisaged purpose prior to use. No warranties of any kind, either express or implied, including warranties of merchantability or fitness for a particular purpose, are made regarding any products mentioned herein and data or information set forth, or that such products, data or information may be used without infringing intellectual property rights of third parties. We reserve the right to make any changes according to technological progress or further developments.

This issue replaces all previous versions.