



Formulation

Name	MILD ACID TOILET BOWL CLEANER	
No.	1166	
Description	This citric acid based toilet bowl cleaner is less acidic than mineral acid based cleaners, yet still effective. Viscosity is controlled by the addition of sodium chloride. The surfactants and the citric acid are derived from bio-renewable resources.	
Formulation	INGREDIENTS:	<u>% by Weight</u> <u>Functionality</u>
	Deionized Water	85.7 Diluent
	Citric Acid	4.0 pH Regulator
	BIO-SOFT® EC-690	2.8 Emulsifier, Cleansing Agent
	BIO-SOFT® TA-2	5.0 Thickener, Cleansing Agent
	Sodium Chloride	2.5 Thickener
	Total	100.0
Procedure	<ol style="list-style-type: none"> 1. Charge Water and dissolve Citric Acid. 2. With good agitation, slowly blend in BIO-SOFT® EC-690, followed by BIO-SOFT® TA-2. 3. Add Sodium Chloride. 4. Blend until homogeneous. 	
Physical Properties	Appearance at 25°C	Clear liquid
	pH, as is	2.5-3.3
	Viscosity at 25°C, cps	2,000
Storage/ Stability	4 weeks at 25°C	Stable
	4 weeks at 4°C	Stable
	4 weeks at 50°C	Stable
	3 Freeze/thaw cycles	Pass
Instructions for Use	Use as-is from a squirt bottle.	
External Comment	Marketing Notes: "Bio-renewable resources" is defined by Stepan as originating from animal, plant, or marine materials. The Biorenewable Carbon Index (BCI) of BIO-SOFT® TA-2 and BIO-SOFT® EC-690 are 82 and 46 respectively. For further information on Stepan's BCI, visit www.stepan.com . This formulation meets U.S. Federal and all State Volatile Organic Compounds (VOC) standards for Bathroom and Tile Cleaners as of January 2019. Label and/or trademark usage of the final product is the sole responsibility of the finished product manufacturer, for which Stepan bears no responsibility.	
Registered Trademarks of Stepan Company	BIO-SOFT®	
For	For applications or product handling assistance, call our Technical Service Department at 1-800-745-7837 (U.S.) or 011-334-76-505-100 (Europe).	

Additional
Assistance

For ordering assistance, call our Account Service Department at 1-800-457-7673.

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