



MATERIAL SAFETY DATA SHEET

Description: SAF BOWL

Revision Number: 02

Document Number: MSDS B013

URINAL/TOILET BOWL CLEANER

GENERAL

SAF-BOWL is a bactericidal acid cleaner that contains powerful antibacterial agents; it whitens, descales and cleans urinals and toilets bowls, leaving a fresh pine fragrance.

FORMULATION

SAF-BOWL is based on a powerful acid to dissolve alkali solids but contains an inhibitor to protect stainless steel, porcelain and ceramics. SAF-BOWL also contains surface-active agents to ensure good contact of the acid with the deposits and a broad-spectrum bactericide to destroy health hazardous and odour producing colonies.

PRODUCT DESCRIPTION

TEST	UNIT	SPECIFICATIONS
Appearance		Clear yellow liquid
Density	g/cm ³	1,05 - 1,10
Acidity	cm ³ 1N KOH/cm ³	3,5 - 4,5

PROPERTIES

- * Removes scale and lime deposits.
- * Contains anti-bacterial ingredients
- * Long lasting pine odour eliminates unpleasant odours.
- * Biodegradable - complies with municipal requirements.
- * Contains inhibitors to protect stainless steel, porcelain and ceramic surfaces.
- * Economical - can be diluted with water.
- * Compatible with septic tanks.

APPLICATION

DEEP CLEAN

Urinals – spray concentrated product onto urinals and surrounding areas. Allow sufficient reaction time, and re-apply if necessary. Light brushing may be necessary. Rinse well.

Toilet bowls – flush bowl and force excess water over the trap with a brush. Spray concentrated product under the rim and pour approximately half a litre into the bowl. Allow to react for 5 minutes. Brush well and flush. Repeat procedure, if necessary.

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MAINTENANCE

Urinals – dilute the product 1: 4 for cleaning (allow 5 min contact time) and spray onto the urinals and surrounding areas. Rinse well.

Toilet bowls – spray under rim and pour about 250ml into the bowl. Allow 5 min minutes for reaction. Brush and flush.

BACTERICIDAL PROPERTIES

Bactericidal Activity
100% kill in 1 Hour

BACTERIA

Ps Aeruginosa
Salmonella Typhi
E. Coli

Staph Aureus
Candida Albicans
Oospora Lactis

PHENOL COEFFICIENT

S Aureus min 5.7
S Typhosa min 3.4

THE RECOMMENDATIONS CONTAINED HERE-IN ARE BASED ON LABORATORY TESTS AND INFIELD EXPERIENCE AND ARE TO THE BEST OF OUR KNOWLEDGE ACCURATE. SINCE TERMS AND CONDITIONS OF ACTUAL USE ARE BEYOND OUR CONTROL, ALL RECOMMENDATIONS ARE MADE WITHOUT WARRANTY, EXPRESS OR IMPLIED.

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Company Details

Name	S.A.F.I.C (PTY) LTD	Tel:	011 406 4000
Address	32 Steele street, Steeledale, JHB	Fax:	011 406 4202
Postal Address	PO BOX 1754, Alberton North 1450	e-mail:	technical@safic.co.za

1. Product Identification

Trade Name	SAF-BOWL	Product Code:	B013
Chemical Family	Non-ionic surfactant, hydrochloric acid, pine oil, inhibitors & bactericide		
Chemical Name	Formulated chemical		
Product Use	Urinal/toilet bowl cleaner		
UN No:	1789		

2. Composition

CAS No.	Hazardous Components	Approx %	OSHA PEL
7647-01-0	Hydrochloric acid 30%	< 30	CL 5 ppm
EEC classification	Corrosive (C)		
R Phrases	R34/36/37/38		

3. Hazards Identification

Main hazard	Corrosive
Fire	Non-flammable.
Inhalation	Burning of mucous membranes
Skin contact	Burning, possible serious damage to eyes.
Eye contact	Burning, possible serious damage to eyes.
Ingestion	Burning of mouth and throat. Nausea, vomiting

4. First Aid Measures

Inhalation	Move patient to fresh air, and allow some water.
Skin contact	Wash area well with water and soap. If skin appears damaged, obtain medical attention.
Eye contact	Flush eyes with water for at least 15 minutes. Irrigate eyes thoroughly while lifting eyelids and rolling eyeballs. If discomfort persists, seek medical attention.
Ingestion	Rinse mouth with water, and allow patient as much water as possible. Obtain medical attention; treat for hydrochloric acid and QAC ingestion.

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5. Fire Fighting Measures

Extinguishing media	Product non-flammable. Use extinguishing agents suitable for surrounding area.
Special hazard	Product will generate heat in contact with water.
Protective clothing	Approved self contained breathing apparatus should be utilised or equivalent equipment.

6. Accidental Release Measures

Personal precautions	Neutralise the product before disposal. The product will etch unsealed concrete. On uncoated metal surfaces, flush off with water to prevent rusting.
Environmental precautions	As per good environmental management practices, prevent contamination of watercourses or ground with large quantities of undiluted product
Small spills	Neutralise spills with SAF – EA NEUTRALISER and dilute with plenty of water.
Large spills	Dyke ahead of liquid spill for later disposal. Prevent the discharge of large amounts of concentrated product into sewerage, and watercourses. Neutralise with SAF – EA NEUTRALISER for disposal of small quantities and run to waste with plenty water.

7. Handling & Storage

Handling	Handle product with care – wear protective clothing and equipment.
Storage	Store in a cool dry area. Keep containers sealed. Store in plastic containers

8. Exposure Controls/Personal Protection

Workers should have access to an eye wash fountain.
If the specific application may result in splashing, safety goggles (VNC11 supplier – MSA) should be utilised.
Neoprene (Technic 420-supplier MSA) gloves should be utilised.
Work in a well-ventilated area or 6300 type mask/6059 cartridge (3M – supplier) should be utilised where ventilation isn't adequate.

9. Physical and Chemical Properties

Appearance	Clear yellow liquid
Acidity	3.5 – 4.5 cm ³ KOH/cm ³
Density	1.05 – 1.10 g/cm ³
Solubility (water)	100%

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10. Stability and Reactivity

Stability	Stable under normal conditions of use and storage.
Incompatible materials	Hydrochloric acid reacts explosively with potassium permanganate, and reacts violently with ammonium hydroxide and sodium hydroxide. Potentially dangerous reaction with sulphuric acid releases hydrogen chloride gas. Incompatible with alkalis.
Hazardous decomposition products	When heated to decomposition, hydrochloric acid emits toxic fumes of chlorine gas.

11. Toxicological Information (based on HCL)

Toxicity	Inhalation rat LC50: 3124ppm, Oral rabbit LD50: 900mg/kg
Skin & eye contact	Corrosive on skin and eye contact.
Chronic toxicity	Prolonged exposure may cause erosion and discoloration of exposed teeth, chronic bronchitis and gastritis.
Carcinogenicity	No evidence of carcinogenic properties.
Mutagenicity	Mutation data reported
Teratogenicity	Teratogenic effects reported.

12. Ecological Information (based on HCL)

Aquatic toxicity – rainbow trout	Large quantities results to low pH, which can be fatal to aquatic organisms.
Aquatic toxicity – daphnia	Low pH may be fatal to aquatic organisms.
Aquatic toxicity – algae	Acidification may be fatal to plants and other living organisms.
Biodegradability	Not expected to biodegrade. (Based on hydrochloric acid), but when neutralised completely salt and water is formed which is not harmful to aquatic life.
Bio accumulation	There's a no possibility of bio accumulation but can lower the pH which can be fatal to aquatic organisms.

13. Disposal Considerations

Disposal method	Neutralise the product before disposing it using SAF – EA NUETRALISER for small quantities, Otherwise dispose as local government agreed method.
Prevent the discharge of large amounts of concentrated product into sewerage, and watercourses. First neutralise the product with SAF – EA NEUTRALISER before containing, flush area with water. Dispose as per agreed local government method for large quantities.	
Disposal of packaging	Recycle or provide to drum collectors or recovers.

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14. Transport Information

UN No:	1789
Substance identity no	B013
ADR/RID class	Class 8: Corrosive liquid
IMDG – packaging group	III
Marine Pollutant	No, but toxic to aquatic organisms.
IMO/IMDG Classification	Class 8: Corrosive liquid
IATA Classification	Class 8: Corrosive liquid

15. Regulatory Information

EEC-hazard classification	Corrosive ©
Risk phrases	R34/36/37/38 R52
Safety phrases	S24/25 S36/37/39 S51/56

16. Other Information

References: SABS 0265: 1999, SABS 0228: 1995, SABS ISO 11014-1:1994, M.S.D.S (Suppliers of raw's)

Issued by: Sabelo Dladla

EMERGENCY NUMBERS: 011 406 4000 / 082 412 2298

The information in this MSDS is based on current knowledge and experience at the date of publication. This MSDS summarises our best knowledge of the health and safety hazard information of the product and is intended only as a guide to the appropriate precautionary handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification of the product. The data relates only to the specific product designated, and does not relate to use of the product in combination with any other material or use of the product in any process. The data is not intended to constitute performance information concerning the product. No express warranty, or implied warranty of merchantability for fitness for a particular purpose is made with respect to the product, its composition, its safety or the information contained in this MSDS sheet.

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APPENDIX A

Revision Date (dd/mm/yy)	Issued By	Revision History		Revision No.
		Description	DCN No.	
11/02/2011	Technical Manager	New Issue	MSDS B013	00
20/05/2013	Technical Manager	Document review and change of Company logo.	MSDS B013	01
16/02/2017	Operations Director	Document Review	MSDS B013	02

CONTROLLED DOCUMENT

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