

MATERIAL SAFETY DATA SHEET

Description: SAF POWER

Revision Number: 03

Document Number: MSDS P005



HEAVY DUTY WATERBASED DEGREASER

GENERAL

SAF-POWER is a versatile, highly concentrated degreaser for effective cleaning of almost any surface.

FORMULATION

SAF-POWER is based on a balance of biodegradable, non-ionic and anionic surfactants, coupling agents, chelating and soil suspending inorganics. SAF-POWER contains a special sodium salt, which improves the products effectiveness over a wide range of applications as an anionic surfactant and as a powerful hydrotrope or solubilizer, especially because of its uniquely high solubility in aqueous solutions and its ability to be successfully blended with solvents like white spirits, or paraffin.

PRODUCT DESCRIPTION

TEST	UNIT	SPECIFICATION
Appearance		Green transparent liquid
Density	g/cm ³	1,060 - 1,100
pH		12.00 – 13.80
NVC	% m/m	22.0 – 27.0

PROPERTIES

- * SAF-POWER is highly concentrated and can be diluted up to 1:200.
- * Due to the fact that SAF-POWER contains no free caustic, it is safe to use.
- * Being water based, SAF-POWER may be safely used on all hard surfaces.
- * SAF-POWER has non-corrosive properties.
- * The water based nature of SAF-POWER renders it non-flammable.
- * Special soil suspending agents in the formulation prevents the re-depositing of dirt removed by SAF-POWER leaving a clean oil-free surface.
- * SAF-POWER has the unique ability to be mixed either with water or with solvents such as paraffin.

Prepared by: Sabelo Dladla

Reviewed by: Zanele Mthimunye

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APPLICATION

Dilutions with water:

SAF-POWER can be used as a floor cleaner by diluting it 1:200 with water for painted floors and 1:50 for concrete floors.

Directions:

- 1) Dilute product as described above depending on the degree of dirt, sometimes a 1:10 dilution may be required.
- 2) Pour out a significant amount of the diluted mixture covering the area to be degreased or cleaned.
- 3) Allow the product to penetrate and lift the dirt if possible to reduce the need for agitation, if not possible the product can be agitated using a hard broom or any suitable material, after the entire area to be cleaned has been thoroughly agitated, the cleaned area can be rinsed with water using a high pressure washer, hose pipe or a bucket of water can also be utilised.
- 4) After ensuring that the floor has been thoroughly rinsed, allow the area to dry.

When SAF-POWER is used through a steam-cleaner, the pre-dilution in the tank should be 1:20, whereas the final dilution at the end of the nozzle should be 1:200.

For heavy duty degreasing (engine cleaning etc.) dilute SAF-POWER 1:20 with water.

Directions:

- 1) Dilute the product as stipulated above and spray it on the area to be degreased using suitable spraying equipment or steam cleaner, avoid contact with electrical or electronic equipments or wires.
- 2) Warm water can also be used to reduce the need for mechanical action, rinse the degreased area with high pressure washer, hose pipe or with a bucket of water.

Dilutions of 1:100 can be used for light duty degreasing.

Paraffin Mixture:

To combine the solvent properties of Paraffin with the rinsability and detergent cleaning strength of SAF-POWER in an economical mixture for cleaning engines, parts-washing etc. mix 1 part SAF-POWER with 10 parts Paraffin and 10 parts water.

To prevent separation of this emulsion the mixture needs to be agitated at intervals. Rinse with water after cleaning.

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THE RECOMMENDATIONS CONTAINED HERE-IN ARE BASED ON LABORATORY TESTS AND INFIELD USE 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.

CONTROLLED DOCUMENT

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Company Details

Name	S.A.F.I.C (PTY) LTD	Tel:	(011) 406 4000
Address	32 Steele Street, Steeldale, JHB, 2067	Fax:	(011) 406 4070
Postal Address	PO BOX 1754, Alberton North, 1450	e-mail:	technical@safic.co.za

1. Product Identification

Trade Name	SAF-POWER	Product code:	P005
Chemical Family	Water based degreaser (containing surfactants, chelating and soil suspending inorganics)		
Chemical Name	Formulated chemical		
Product Use	Cleaning and degreasing of most hard surfaces		

2. Composition

CAS No.	Hazardous Components	Approximate %	OSHA PEL
1310-58-3	Potassium hydroxide	< 5	CL 2 mg/m ³
111-76-2	Glycol ether	< 10	25ppm TWA; 120mg/m ³
EEC classification	Irritant (Xi), SAF-POWER		
R Phrases	R36/37/38, SAF-POWER		

(No free potassium hydroxide available in formulation – reacted with sulphonic acid)

3. Hazards Identification

Main Hazard	Irritant
Fire	Non-flammable
Inhalation	Excess spray – coughing
Skin contact	Irritant. Prolonged or frequent contact may lead to defatting of skin
Eye contact	Irritant. Burning
Ingestion	Symptom: nausea & vomiting.

4. First Aid Measures

Inhalation	Move patient to fresh air.
Skin contact	Rinse area well with water. If necessary, use a hand-cream to replenish moisture.
Eye contact	Flush eyes with water for at least 15 minutes. Irrigate eyes thoroughly while lifting eyelids and rolling eyeballs. If irritation persists, seek medical attention.
Ingestion	Rinse mouth with water, and allow patient as much water as possible. If large quantities have been swallowed obtain medical attention.

5. Fire Fighting Measures

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Product non-flammable. Use extinguishing agents suitable for surrounding fire.

Self contained breathing apparatus or equivalent should be utilised should there be fire in surrounding area.

6. Accidental Release Measures

As per good environmental management practices, prevent contamination of watercourses or ground with large quantities of undiluted product.

Small spills	Remove excess with absorbent material and flush residue 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.
General	When disposing large quantities, the alkaline nature of the product should be taken into consideration.

7. Handling & Storage

Handling	Normal handling procedure for heavy duty detergents to minimise personal exposure
Storage	Store in a cool dry area. Keep containers sealed. No special requirements.

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 gloves (Technic 420-supplier MSA) 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 green liquid
pH	12.00 – 13.00
Density	1.060 – 1.100g/cm ³
Non volatile	22.0 – 27.0 %m/m
Solubility (water)	100 %

10. Stability and Reactivity

Stability	Stable under normal conditions.
Incompatible materials	Strong acids
Hazardous decomposition products	Toxic fumes may be liberated on decomposition

11. Toxicological Information (based on KOH)

Toxicity	Skin (human): 50 mg/24H SEV.
	Acute oral: LD50 = 365 mg/kg, rat

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Carcinogenicity	No evidence of carcinogenic properties
Mutagenicity	No evidence of mutagenetic effects
Neurotoxicity	No evidence of neurotic effects
Reproductive hazard	No hazard expected.

12. Ecological Information (based on glycol ether)

Fathead minnow	96 hr bioassay LC50: 1700 mg/l
Daphnia Magna	48 hr bioassay LC50: >1000 mg/l
Bacterial	IC50: > 5000 mg/l
Biodegradability	Biodegradation: 88 % 20 days
Bio accumulation	No possibility of bio accumulation.
Other Information	This material is not expected to be harmful to aquatic or marine organisms

13. Disposal Considerations

Disposal methods identified are for the product as sold. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permissible under applicable rules, regulations, and/or laws governing your location.	
Dilute product 1000 times and run to waste with plenty of water.	
When disposing of large quantities, the alkaline nature and solubility of the product in water (section 9) should be taken into consideration.	
Disposal of packaging	Packaging should be recycled.

14. Transport Information

Substance identity no	P005
ADR/RID class	Not Regulated
Packaging group	III
Marine Pollutant	No
IMO/IMDG Classification	Not Regulated
IATA Classification	Not Regulated

15. Regulatory Information

EEC-hazard classification	: Irritant (Xi)
Risk phrases	R36/37/38
Safety phrases	S24/25 S36

16. Other Information

References: SABS 0265:1999, SABS 0228:1995, SABS ISO 11014-1:1994, Sax Dangerous Goods, Raw Material Manufacturer's MSDS's.
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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.

APPENDIX A

Revision Date (dd/mm/yy)	Issued By	Revision History		Revision No.
		Description	DCN No.	
11/02/2011	Technical Manager	New Issue	MSDS P005	00
20/05/2013	Technical Manager	Document review and change of Company logo.	MSDS P005	01
20/02/2016	Operations Director	Review of risk on Section 14	MSDS P005	02
09/06/2016	Operations Director	Review of risk on Section 12	MSDS P005	03

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