

MATERIAL SAFETY DATA SHEET

Description: SAF HEAVY

Revision Number: 01

Document Number: MSDS H001



HEAVY DUTY SOLVENT BASED DEGREASER

GENERAL

SAF-HEAVY is an aromatic solvent based, emulsifiable degreasing compound. SAF-HEAVY removes most greases, oils, waxes and engine dirt from automotive and industrial machinery. Due to the strong solvents SAF-HEAVY may dull or strip high gloss paints and must be used with care where decorative finishes are involved.

FORMULATION

SAF-HEAVY is a blend of detergents and solvents selected to produce a very stable emulsion for good rinsability or dilution with water. SAF-HEAVY contains excessive surfactants so that it may be used as a concentrate for dilution with further cheap solvents such as white spirits, paraffin or preferably high aromatic solvents. If strong solvents are not available for dilution SAF-HEAVY PRE-MIX should be used as it already contains the aromatic solvents selected for best degreasing results. The high aromatic solvents, used in SAF-HEAVY give powerful dirt removal capabilities due to its very high capacity for dissolving large amounts of oils, waxes, bitumen and soils and its ability to dissolve the widest spectrum of dirt.

PRODUCT DESCRIPTION

TEST	UNIT	SPECIFICATION
Appearance	-	Clear blue liquid
Density	g/cm ³	0,89 - 0,91
pH of emulsion 5% v/v	-	7,0 - 8,5
Emulsifiability (5% v/v)	%	2 – 3 % separation after 1 hour

PROPERTIES

- Powerful grease cutting properties due to its high aromatic content and effective detergents selection.
- Due to the powerful solvents and wetting agents, it cleans without a need for agitation.
- Easy and total rinsability is made possible by including emulsifiers and detergents that prevent re-depositing of dirt and oil.
- Substantially strengthens the cleaning properties and rinsability of cheap solvents such as paraffin because of the excessive amounts of surfactants added to SAF-HEAVY.

Prepared by: Sabelo Dladla

Reviewed by: Doug Cutter

Status: Issued

Approved by: Doug Cutter

Revision Date: 30 March 2015

Issue Date: 30 March 2015

It is the responsibility of the user to verify that this copy is the latest version

MATERIAL SAFETY DATA SHEET

Description: SAF HEAVY **Revision Number:** 01

Document Number: MSDS H001



- No oily film is left after cleaning and rinsing.

APPLICATION

SAF-HEAVY is used for cold cleaning of industrial machinery, floors and machine parts to remove dirt, grease, oils, bitumen and waxes.

Spray or brush onto surface either neat or diluted, then flush off with water after allowing sufficient time for the solvent to penetrate, loosen and dissolve the dirt.

Dilution with paraffin can vary between 1:5 and 1:10.

SAF-HEAVY is successfully used on heavy machinery, automotive machinery, construction and road equipment, machine shops, shipyards and railway workshops, airways maintenance shops and general maintenance shops where decorative finishes are not required to be protected.

SAF-HEAVY may be used in a dip application.

NOTES:

SAF-HEAVY will defat skin on long exposure and protective clothing should be worn if skin contact is likely.

SAF-HEAVY is flammable and should be replaced by SAF-INDUSTRIAL (water based degreaser) where this hazard is a serious problem.

Avoid application on high gloss paint because the solvents in SAF-HEAVY might dull these surfaces.

SAF-HEAVY should not be used through steam or pressure washers.

THE RECOMMENDATIONS CONTAINED HERE-IN IS 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.

Prepared by: Sabelo Dladla

Reviewed by: Doug Cutter

Status: Issued

Approved by: Doug Cutter

Revision Date: 30 March 2015

Issue Date: 30 March 2015

It is the responsibility of the user to verify that this copy is the latest version

MATERIAL SAFETY DATA SHEET

Description: SAF HEAVY Revision Number: 01

Document Number: MSDS H001



Company Details

Name	S.A.F.I.C (PTY) LTD	Tel:	+27 11 406 4000
Address	32 Steel street, Steeldale, JHB 2197	Fax:	+27 11 406 4252
Postal Address	PO BOX 1754, Alberton North, 1450	e-mail:	technical@safic.co.za

1. Product Identification

Trade Name	SAF-HEAVY	Product code: H001
Chemical Family	Aromatic solvents, anionic & non-ionic surfactants	
Chemical Name	Formulated chemical	
Product Use	Removal of heavy grease and oil	
UN Number	1268 (Flammable liquid)	

2. Composition

CAS No.	Hazardous Components	Approximate %	Limit
64742-95-6	Light aromatic petroleum solvent	>60	TLV: 100 ppm
64742-88-7	Medium aliphatic petroleum solvent	<10	TLV: 100 ppm
EEC classification	Flammable, SAF- HEAVY		
R Phrases	R10, R22, R38, R52/53, SAF - HEAVY		

3. Hazards Identification

Main hazard	Flammable, use away from ignition sources	Flash Point: 45°C
Inhalation	Symptoms: Respiratory irritation, dizziness, nausea, unconsciousness	
Skin contact	Symptoms: Prolonged or frequent contact may lead to defatting of skin resulting in irritation and dermatitis.	
Eye contact	Symptoms: Irritation of eye, burning	
Ingestion	Symptom: Nausea, vomiting, serious lung damage	

4. First Aid Measures

Inhalation	Remove patients to fresh air. Seek medical attention if symptoms occur.
Skin contact	Remove contaminated clothing and launder clothing before re-use. Wash contact areas well with soap and water.
Eye contact	Flush eyes with water for at least 15 minutes. Irrigate eyes thoroughly while lifting eyelids and rolling eyeballs. Seek medical attention, if irritation persists.
Ingestion	Do not induce vomiting. Rinse mouth with water, and allow patient 1 or 2 glasses of water. Obtain medical attention immediately.
Note to doctors	If aspirated into the lungs, product may result in chemical pneumonitis. Treat appropriately.

5. Fire Fighting Measures

Prepared by: Sabelo Dladla
Reviewed by: Doug Cutter
Status: Issued

Approved by: Doug Cutter
Revision Date: 30 March 2015
Issue Date: 30 March 2015

It is the responsibility of the user to verify that this copy is the latest version

MATERIAL SAFETY DATA SHEET

Description: SAF HEAVY

Revision Number: 01

Document Number: MSDS H001



Extinguish with carbon dioxide (CO ₂), dry powder, foam, or water fog.	
Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.	
Special hazards	Do not smoke or use at elevated temperature.
Protective clothing	Approved self contained breathing apparatus should be utilised or equivalent.

6. Accidental Release Measures

Personal precaution	Avoid prolonged skin contact, and use in well ventilated areas.
Environmental precautions	Do not discharge into sewerages, storm water drains or any places that may harm the environment.
Small spills	Remove excess with absorbent material and dispose of in accordance with current laws and regulations.
Large spills	Notify appropriate authorities. Prevent discharge of product into sewers, and watercourses, as this product can be harmful to aquatic environment.

7. Handling & Storage

Storage	Store in a cool dry area. Keep containers sealed. Store away from sparks, and sources of ignition.
Handling	Avoid prolonged repeated skin contact; wear solvent resistant gloves.

8. Exposure Controls/Personal Protection

Workers should have access to an eye wash fountain.	
If the specific application may result in splashing, safety goggles (such as VNC11 – supplier – MSA) should be supplied.	
If prolonged or frequent contact is expected, NITRILE gloves can be utilised (such as Ultranitrl 492 – supplier: MSA)	
Handle in a well-ventilated area, or a respiratory cartridge (such as the 6300 respiratory/6059 cartridge from 3M) should be utilised if ventilation is not adequate.	

9. Physical and Chemical Properties

Appearance	Clear blue liquid
PH	7.0 – 8.5 (5%)
Density	0.89 – 0.91 g/cm ³
Emulsifiability	2 – 3% separation after 1 hour
Solubility (water)	Emulsifies

10. Stability and Reactivity

Stability	Stable under normal conditions.
Incompatible materials	Strong oxidizers.

Prepared by: Sabelo Dladla

Reviewed by: Doug Cutter

Status: Issued

Approved by: Doug Cutter

Revision Date: 30 March 2015

Issue Date: 30 March 2015

It is the responsibility of the user to verify that this copy is the latest version

MATERIAL SAFETY DATA SHEET

Description: SAF HEAVY

Revision Number: 01

Document Number: MSDS H001



Hazardous decomposition products	Carbon monoxide.
----------------------------------	------------------

11. Toxicological Information (based on aliphatic/aromatic petroleum blend)

Toxicity	Acute oral: LD50 > 2000 mg/kg, rats
Skin & eye contact	Dermal, LD ₅₀ (rabbits) > 2000 mg/kg, based on similar products and/or the components.
Carcinogenicity	No evidence of carcinogenic properties
Mutagenicity	No evidence of mutagenic effects
Teratogenicity	No evidence of teratogenic effects
Reproductive hazard	Not expected to impair fertility

12. Ecological Information (based on aliphatic/aromatic petroleum blend)

Aquatic toxicity – rainbow trout	IC50 = 10 mg/l Harmful to aquatic organisms
Aquatic toxicity – daphnia	IC50 = 10 mg/l Harmful to aquatic organisms
Aquatic toxicity - algae	IC50 = 10 mg/l Harmful to aquatic organisms
Biodegradability	The product is readily biodegradable.
Bio accumulation	No evidence of bioaccumulation
Mobility	Spillages may penetrate the soil to cause ground water contamination.

13. Disposal Considerations

May be incinerated. Note local restrictions. Dispose as per local government method.	
Disposal of packaging	Empty containers may contain product residue, including flammable or explosive vapours. Do not cut, puncture or weld on or near container. Recycle or provide to drum collectors.

14. Transport Information

UN Number	1268
Substance identity no	H001
ADR/RID class	Class 3: Flammable liquid
IMDG – packaging group	III
Marine Pollutant	Harmful to aquatic organisms
IMO/IMDG Classification	IMDG Class 3 Flammable liquid
IATA Classification	Class 3 Flammable liquid

15. Regulatory Information

Hazard classification	Flammable (F)
Risk phrases	R10, R22, R38, R52/53
Safety phrases	S23/24, S43, S61/62

Prepared by: Sabelo Dladla

Reviewed by: Doug Cutter

Status: Issued

Approved by: Doug Cutter

Revision Date: 30 March 2015

Issue Date: 30 March 2015

It is the responsibility of the user to verify that this copy is the latest version

MATERIAL SAFETY DATA SHEET

Description: SAF HEAVY

Revision Number: 01

Document Number: MSDS H001



16. Other Information

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

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.

APPENDIX A

Revision Date (dd/mm/yy)	Issued By	Revision History		Revision No.
		Description	DCN No.	
18/02/2011	Technical Manager	New Issue	MSDS H001	00
30/03/2015	Operations Director	Reviewed	MSDS H001	01

Prepared by: Sabelo Dladla
Reviewed by: Doug Cutter
Status: Issued

Approved by: Doug Cutter
Revision Date: 30 March 2015
Issue Date: 30 March 2015

It is the responsibility of the user to verify that this copy is the latest version