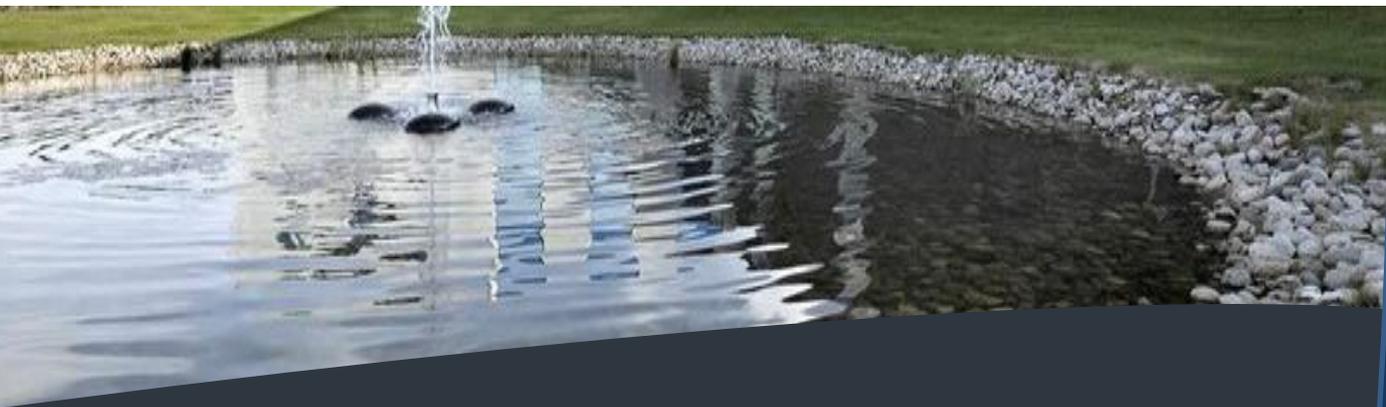


# Germ Africa Lubricants Brochure

Filtration | Lubricants | Dosing Pumps



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## Table of Contents

Germ Africa Lubricants Brochure .....	1
About Germ Africa .....	3
Germ Africa Lubricants Division .....	4
Neat Cutting Oil .....	5
Filmac Range .....	5
Filmac E12M.....	5
Filmac E12S.....	5
FILMAC E12L .....	6
Soluble Cutting Oil .....	7
Filmis Range .....	7
Filmis M.....	7
FILMIS T.....	7
Sigma TSB .....	8
SIGMA FS.....	9
<i>Features and Benefits</i> .....	9
SIGMA TSSM .....	10
<b>EP and Lubricity Package</b> .....	10
Which Germ Africa lubricant is best suited to my needs? .....	12



## About Germ Africa

Germ Africa commenced business in South Africa in 1905 as the marketing division of a major UK company, Germ Oil. Local incorporation in South Africa, as a separate public company followed in 1938.

In the late 1960's the South African company was sold to local management following a take-over of its parent company in the UK. In 1979 it was acquired by current management.

Head office is in Johannesburg with a sales office and manufacturing facility in Durban.

We strive to offer superior quality and service to our customers. To this end we will continue to review our product portfolio and retain an adequate and realistic stock holding to satisfy customer needs. We will endeavour to stay focused, with the assistance of our major international suppliers, on the benefits that current global research and development can offers.

The company, Germ Africa operates three major product divisions, namely



- Filtration
- Dosing Pumps
- Lubricants.

Visit [www.germafrica.co.za](http://www.germafrica.co.za) to view our entire product range online at Germ Africa our range is based around Lubricants, Filter Cartridges, Dosing Pumps and Housings.

Our commitment to your quality ensures your peace of mind.



## Germ Africa Lubricants Division

The Lubricants Division is a supplier of specialised lubricants, primarily to the metal-machining, wire-drawing and steel industries. These lubricants are partly imported and partly blended by Germ Africa in our own blend plant. The technical expertise of Germ Africa is augmented by the maintaining of close technical ties with its former parent company, now known as Kuwait Petroleum (GB) Ltd, which is in turn a part of Kuwait



### Neat Cutting Oils

Filmac range

### Soluble Cutting Oils

Filmis range

Sigma range

### Grinding Fluids

Bryto No 5

Bryto 50B

### Wire & Tube Drawing

Priamus Range

Odin range

Cudra range

Wirol range

Aldra range

Cyldraw range

### Hydraulic Oils

Momus range

Kineticol range

Rust Protection

Brytodex

### Compressor Oil

Ardton Range

### Tapping Fluid

Filmac VC5

### Ancillary Metal Working

KYM fluid

Annealer fluid

Germicide

Brytoklean

Permeo BP

### Machineway Oils

Dynobear range

Heavibear range

### Gear Oils

Germol range

Hypep

### General

Bryto rope dressing

Cleanosine degreaser

Germ hand cleaner

Neo-Astra greases

All our lubricants are available in **5, 10, 20 and 210** litre pack sizes

Our Lubricants are used in many different industries including:

**Steel Mills**

**Wire & Tube Drawing**

**Metalworking**

**Hydraulics & Engineering**

For further information on this range of lubricants, please contact Germ Africa via

[info@germafrica.co.za](mailto:info@germafrica.co.za)



## Neat Cutting Oil

### Filmac Range

#### Filmac E12M

Filmac E12M is medium viscosity neat cutting oil utilising solvent refined base oils, fortified with non-active EP agents and lubricant additives.

#### *Applications*

Filmac E12M is suitable for use on **medium to low machinability materials**, including certain ductile aluminium alloys; it is **suitable for most ferrous and nonferrous metals**.

Filmac E12M is recommended as a cutting oil for all medium to heavy work on single and multi-spindle automatic machines. Particularly recommended where cutting oil rationalisation is required and material changes are frequent.



#### Filmac E12S

Filmac E12S is a heavy duty neat cutting oil. The product has been developed for difficult operations on hard to machine steel alloys. The treatment consists of a powerful EP additive package together with a heavy injection of lubricated agent to provide boundary lubrication at the tool tip chip interface.

#### *Applications*

Filmac E12S is the recommended product for all **heavy duty machining operations**. The product shows excellent performance in operations involving very heavy cuts and high stock removal, also where a high surface finish is of prime importance. Operations include **broaching, heavy duty turning, threading and automatic work, milling, drilling, boring, reaming and shaping**.



## FILMAC E12L

Filmac E12L - low viscosity neat oil treated with EP and lubricated additives that helps the cutting action and improves surface finish.

### *Applications*

Filmac E12L is the recommended product for all finish work, precision grinding operations such as form, profile and thread grinding where fine cuts are employed to give high surface finishes. The product is also recommended for honing operations using all grit sizes, including those incorporating diamond materials.

Filmac E12L has been used with great success for deep hole drilling.

### *Features and Benefits*

#### **Balanced formulation**

Abrasive wheels and stones are kept clean, minimising clogging, glazing, and skidding on the work piece. Additionally Filmac E12L is formulated with an EP agent and lubricity package that helps the cutting action and improves surface finish.

#### **Superior cutting performance**

The EP contained in **Filmac E12L** allows for far higher cutting performance than traditional paraffin based products, and it produces a better finish than is possible with emulsion based products, additionally the EP is only active at the point of stone to metal contact, therefore it will not stain or corrode copper alloy machine parts.



## Soluble Cutting Oil

### Filmis Range

#### Filmis M

##### *Product Description*

**Filmis M** is a well tried conventional soluble type metal working fluid which forms a milky emulsion when diluted with water. Included in the formulation is a biocide to give a bacterial resistant emulsion. The product has been formulated with an effective corrosion inhibiting package to allow high dilutions.

##### *Applications*

Filmis M is a versatile product and finds application in all light duty general machining areas such as boring, drilling, milling, reaming, turning etc. on steel, cast iron and all commonly occurring materials.

##### *Features and Benefits*

###### High Dilution Rates

Filmis M may be used at dilution rates of up to 1 in 40 therefore showing good cost performance and high thermal efficiency.

###### Effective Corrosion Inhibiting Package

Filmis M contains a corrosion inhibitor package which is effective at high dilutions protects both the machine and the work from corrosion.

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Filmis M contains a corrosion inhibitor package which is effective at high dilutions protecting both the machine and the work from corrosion.

#### FILMIS T

##### *Product Description*

**Filmis T** is a soluble type metal working fluid which forms an opalescent emulsion when diluted with water. The emulsion formed is biocide and long lasting due to the incorporation of phenolic coupling agents. The product has been formulated with an effective corrosion inhibiting package to allow high dilutions.



### *Applications*

**Filmis T** is a versatile product and finds application in all general machining areas such as boring, drilling, milling, reaming, turning etc. The product is suited for most carbon and stainless steels, together with cast iron, copper and aluminium.

### *Features and Benefits*

#### **High Dilution Rates**

Filmis T may be used at dilution rates of up to 1 in 70 therefore showing good cost performance and high thermal efficiency.

#### **Biocidal Properties**

The product has inherently strong biocidal activity due to the phenolic coupling agents, this leads to long emulsion life and safety of the operator from potential pathogens.

#### **Effective Corrosion Inhibiting Package**

Filmis T contains a corrosion inhibitor package which is effective at high dilutions protecting both the machine and the work from corrosion.

## **Sigma TSB**

### *Product Description*

**Sigma TSB** is semi-synthetic water dilutable cutting fluid with considerable advantages over conventional soluble oil emulsion based products. The formulation includes an EP package together with lubricity additive and is cresol, phenol and nitrite free.

Sigma TSB forms an opalescent emulsion which is biostable and long lasting even in very hard water.

### *Applications*

Sigma TSB is recommended for all arduous machining operations, and especially those in CNC machines, manufacturing centres and centralised systems. It is suitable for most materials including high tensile steels, yellow metals and aluminium.



### *Features and Benefits*

#### **Contains no carcinogens**

Sigma TSB does not contain any known carcinogenic ingredients such as nitrites, phenols and cresols thus improving occupational health.

#### **EP and Lubricity Package**

The formulation includes an EP and lubricity package, ensuring improved finish comparable with neat oils in many applications. The additive package by providing lubrication at the tool tip improves tool life and reduces built up edge.

#### **Bio-stable Opalescent Emulsion**

The emulsion being bio-stable ensures freedom from bad odours and long life, whilst the opalescent emulsion allows visual examination of the work piece.

#### **Contains Powerful Corrosion Inhibitors**

Sigma TSB contains superior corrosion inhibitors giving outstanding rust protection with no sticky residue or sludge deposits on the machine.

## **SIGMA FS**

### *Product Description*

SIGMA FS is a Superior synthetic soluble cutting fluid. The product is suitable for general machine shop use.

Sigma FS is a revolutionary full synthetic base water-soluble cutting fluid with considerable advantages over conventional soluble emulsions

### *Applications*

Sigma FS is a full-synthetic soluble cutting fluid for machine shop use, which out performs normal cutting fluids.

### *Features and Benefits*

- SigmaFS does not contain any known carcinogenic ingredients such as nitrites, phenols and cresols thus improving occupational health.
- Forms a translucent blue solution on dilution with water.
- Increased tool life is normal experienced.
- Can be used on a variety of metals, including copper, aluminium and ferrous metals.
- It is not affected by the hardness of water.
- Biostability is ensured by chemical composition.



### Bio-stable, Aqua Marine Blue Solution

The emulsion being Bio-stable ensures freedom from bad odours and long life, whilst the marine blue solution allows visual examination of the work piece.

### Contains Powerful Corrosion Inhibitors

**Sigma FS** contains superior corrosion inhibitors giving outstanding rust protection with no sticky residue or sludge deposits on the machine.

### Stable in All Waters

**Sigma FS** forms stable solutions even in very hard water leading to easily maintained working fluid.

## SIGMA TSSM

Sigma TSSM is a semi-synthetic, nitrite free, bio-stable, extreme pressure soluble metal working fluid.

### *Product Description*

Sigma TSSM is semi-synthetic water soluble cutting fluid with considerable advantages over conventional soluble oil emulsion based products. The formulation includes an EP package together with lubricity additive and is cresol, phenol and nitrite free.

Sigma TSSM forms a green opalescent emulsion which is bio-stable and long lasting even in very hard water.

### *Applications*

Sigma TSSM is recommended for all arduous machining operations, and especially those in CNC machines, manufacturing centres and centralised systems. It is suitable for most materials including high tensile steels, yellow metals and aluminium. Sigma TSSM can be used for gear cutting, broaching and threading.

### *Features and Benefits*

#### Contains no carcinogens

**Sigma TSSM** does not contain any known carcinogenic ingredients such as nitrites, phenols and cresols thus improving occupational health.

#### EP and Lubricity Package



The formulation includes an EP and lubricity package, ensuring improved finish comparable with neat oils in many applications. The additive package by providing lubrication at the tool tip improves tool life and reduces built up edge.

#### Biostable Opalescent Emulsion

The emulsion being biostable ensures freedom from bad odours and long life, whilst the opalescent emulsion allows visual examination of the work piece.

#### Low Foaming

The emulsion has a low foaming tendency.

#### Contains Powerful Corrosion Inhibitors

Sigma TSSM contains superior corrosion inhibitors giving outstanding rust protection with no sticky residue or sludge deposits on the machine.

#### Stable in All Waters

Sigma TSSM forms stable emulsions even in very hard water leading to easily maintained working fluid.



## Which Germ Africa lubricant is best suited to my needs?

FILMAC E12L	NEAT CUTTING OIL – USED MAINLY FOR HONING
FILMAC E12M	NEAT CUTTING OIL – THREAD CUTTING
FILMAC E12S	NEAT CUTTING OIL – HEAVIER THREAD CUTTING OIL
FILMIS M	MILKY – MINERAL BASED SOLUBLE CUTTING OIL
FILMIS T	TRANSLUCENT – MINERAL BASED SOLUBLE CUTTING OIL – CONTAINS BIOCIDES – LONGER EMULSION LIFE
SIGMA TSB	SEMI SYNTHETIC SOLUBLE CUTTING OIL
SIGMA TSSM	GREEN SEMI SYNTHETIC SOLUBLE CUTTING OIL
SIGMA FS	FULLY SYNTHETIC SOLUBLE CUTTING OIL
BRYTO NO. 5	GRINDING FLUID
DYNOBEAR M	SLIDEWAY OIL – 68
HEAVIBEAR B	TACKIER SLIDEWAY OIL
KINETICOL 1C	HYDRAULIC OIL – 32
KINETICOL DC	HYDRAULIC OIL – 46
KINETICOL 1D	HYDRAULIC OIL – 68
GERMICIDE 27	BIOCIDE
BRYTOKLEAN NO. 7	SYSTEM CLEANER
BRYTODEX	RUST PREVENTATIVE
GERMOL EP 400	150 GEAR OIL
GERMOL EP 500	220 GEAR OIL
GERMOL EP 600	320 GEAR OIL
CLEANOSINE	GENERAL PURPOSE CLEANER – I.E. MACHINES, FLOORS
DYNOBEAR ZERO	PNEUMATIC AIR TOOL OIL

