



## SAFETY DATA SHEET

### Airforce 4000 ISO VG 46

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

##### 1.1. Product identifier

<b>Product name</b>	Airforce 4000 ISO VG 46
<b>Product number</b>	7082
<b>Internal identification</b>	GHS21476
<b>REACH registration number</b>	n/a Mixture

##### 1.2. Relevant identified uses of the substance or mixture and uses advised against

<b>Identified uses</b>	Air compressor oil
<b>Uses advised against</b>	No specific uses advised against are identified.

##### 1.3. Details of the supplier of the safety data sheet

<b>Supplier</b>	Morris Lubricants Castle Foregate Shrewsbury Shropshire SY1 2EL +44 (0) 1743 232200 +44 (0) 1743 353584 sds@morris-lubricants.co.uk
-----------------	--

##### 1.4. Emergency telephone number

<b>Emergency telephone</b>	+44(0)1743 232200 (08.45 - 17.00 GMT)
----------------------------	---------------------------------------

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification (EC 1272/2008)

<b>Physical hazards</b>	Not Classified
<b>Health hazards</b>	Not Classified
<b>Environmental hazards</b>	Not Classified

**Classification (67/548/EEC or 1999/45/EC)** Not classified

##### 2.2. Label elements

<b>Hazard statements</b>	NC Not Classified
<b>Supplemental label information</b>	EUH210 Safety data sheet available on request.

##### 2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

#### SECTION 3: Composition/information on ingredients

## Airforce 4000 ISO VG 46

### 3.2. Mixtures

<b>Distillates,hydrotreated heavy paraffinic</b>		<b>60-100%</b>
CAS number: 64742-54-7	EC number: 265-157-1	REACH registration number: 01-2119484627-25-0014
<b>Classification</b>	<b>Classification (67/548/EEC or 1999/45/EC)</b>	
Not Classified	-	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

**Composition comments**      If REACH registration numbers do not appear the substance is either exempt from registration, does not meet the minimum volume threshold for registration, the registration date has not yet come due or this information is proprietary. This product contains less than 3% DMSO measured by IP346 and shall therefore not be classified.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

**General information**      Get medical attention if any discomfort continues.

**Inhalation**                If spray/mist has been inhaled, proceed as follows: Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention if any discomfort continues.

**Ingestion**                 Get medical attention if any discomfort continues. Do not induce vomiting.

**Skin contact**              Remove contaminated clothing immediately and wash skin with soap and water.

**Eye contact**              Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for 15 minutes. Get medical attention promptly if symptoms occur after washing.

#### 4.2. Most important symptoms and effects, both acute and delayed

**General information**      If aspiration into the lungs is suspected, eg when vomiting, admit to hospital immediately.

**Inhalation**                 Upper respiratory irritation.

**Ingestion**                 May cause discomfort if swallowed. The product contains mineral oil, which if aspirated into the lungs through vomiting after ingestion, may result in chemical pneumonia.

**Skin contact**              Prolonged contact may cause redness, irritation and dry skin.

**Eye contact**              Irritation of eyes and mucous membranes.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor**      Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media**    Extinguish with foam, carbon dioxide, dry powder or water fog.

**Unsuitable extinguishing media**    Do not use water jet as an extinguisher, as this will spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

**Specific hazards**            Heat from fire could result in drums bursting

## Airforce 4000 ISO VG 46

**Hazardous combustion products** Protection against nuisance dust must be used when the airborne concentration exceeds 10 mg/m<sup>3</sup>. Oxides of carbon. Oxides of nitrogen. Fire may also create other unidentified organic gases some of which may be toxic.

### 5.3. Advice for firefighters

**Protective actions during firefighting** Control run-off water by containing and keeping it out of sewers and watercourses.

**Special protective equipment for firefighters** Wear self-contained breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** For personal protection, see Section 8. In case of spills, beware of slippery floors and surfaces.

### 6.2. Environmental precautions

**Environmental precautions** The product is insoluble in water and will spread on the water surface. Contain spillage with sand, earth or other suitable non-combustible material. Avoid the spillage or runoff entering drains, sewers or watercourses.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** Contain and absorb with sand, earth or other suitable non-combustible material. In case of spillage on water prevent the spread by use of suitable barrier equipment

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** Avoid spilling. Always remove oil with soap and water or skin cleaning agent, never use organic solvents. Do not use oil-contaminated clothing or shoes, and do not put rags moistened with oil into pockets.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage precautions** Store in tightly-closed, original container in a dry, cool and well-ventilated place.

**Storage class** Miscellaneous hazardous material storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

##### **Distillates,hydrotreated heavy paraffinic**

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 10 mg/m<sup>3</sup>

##### **Distillates (petroleum) solvent-dewaxed heavy paraffinic**

Long-term exposure limit (8-hour TWA): ACGIH 5 mg/m<sup>3</sup>

Short-term exposure limit (15-minute): ACGIH 10 mg/m<sup>3</sup>

## Airforce 4000 ISO VG 46

### Highly refined mineral oil (C15 - C50)

Long-term exposure limit (8-hour TWA): 5 mg/m<sup>3</sup>

ACGIH = American Conference of Governmental Industrial Hygienists.

### Alkyl thiophosphate ester

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 2.3 mg/m <sup>3</sup>
<b>PNEC</b>	<ul style="list-style-type: none"> <li>- Fresh water; 0.038 mg/l</li> <li>- Marine water; 0.0038 mg/l</li> <li>- Intermittent release; 0.38 mg/l</li> <li>- Sediment (Freshwater); 12.1 mg/kg</li> <li>- Sediment (Marinewater); 1.21 mg/kg</li> </ul>

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

#### Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

#### Hand protection

The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

#### Other skin and body protection

Use barrier creams to prevent skin contact.

#### Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Wash promptly with soap and water if skin becomes contaminated.

#### Respiratory protection

No specific recommendations. Respiratory protection must be used if the airborne contamination exceeds the recommended occupational exposure limit.

#### Thermal hazards

Not anticipated under normal conditions of use. The product is combustible if heated excessively and an ignition source is applied.

#### Environmental exposure controls

Do not allow product to contaminate land.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Liquid.
<b>Colour</b>	Pale Amber
<b>Odour</b>	Characteristic. Oil-like.
<b>Odour threshold</b>	Not known.
<b>pH</b>	Not applicable.
<b>Melting point</b>	-39°C Pour point

## Airforce 4000 ISO VG 46

<b>Initial boiling point and range</b>	>320°C @ 101.3 kPa
<b>Flash point</b>	220°C PMCC (Pensky-Martens closed cup).
<b>Evaporation rate</b>	Not relevant.
<b>Upper/lower flammability or explosive limits</b>	Not known.
<b>Other flammability</b>	Product is not flammable but on excessive heating may become combustible.
<b>Vapour pressure</b>	<0.1 kPa @ 20°C
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	0.870 @ 15.6°C
<b>Solubility(ies)</b>	Insoluble in water. Soluble in the following materials: Organic solvents.
<b>Partition coefficient</b>	Not determined. log Kow:>7 Typical of mineral oil.
<b>Auto-ignition temperature</b>	No specific test data are available.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	44 cSt @ 40°C
<b>Explosive properties</b>	Not considered to be explosive.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.

### 9.2. Other information

<b>Volatile organic compound</b>	The product is a complex mixture, the majority of which would not be classed as a VOC. However it cannot be discounted that trace or low levels of VOC's may be present.
----------------------------------	--

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

<b>Reactivity</b>	There are no known reactivity hazards associated with this product.
-------------------	---

### 10.2. Chemical stability

<b>Stability</b>	Stable at normal ambient temperatures and when used as recommended.
------------------	---

### 10.3. Possibility of hazardous reactions

<b>Possibility of hazardous reactions</b>	Unlikely to occur under normal conditions of use.
---	---

### 10.4. Conditions to avoid

<b>Conditions to avoid</b>	Avoid heat, flames and other sources of ignition.
----------------------------	---

### 10.5. Incompatible materials

<b>Materials to avoid</b>	Strong oxidising agents.
---------------------------	--------------------------

### 10.6. Hazardous decomposition products

<b>Hazardous decomposition products</b>	Oxides of carbon. Oxides of nitrogen.
---	---------------------------------------

## SECTION 11: Toxicological information

## Airforce 4000 ISO VG 46

### 11.1. Information on toxicological effects

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Not expected to be highly toxic based on information of ingredients. Based on available data the classification criteria are not met.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Not expected to be highly toxic based on information of ingredients. Based on available data the classification criteria are not met.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** The product is unlikely to present any significant inhalation hazard at ambient temperatures and under normal conditions of use. Not determined.

#### Serious eye damage/irritation

**Serious eye damage/irritation** May cause mild, short lasting discomfort to eyes.

#### Respiratory sensitisation

**Respiratory sensitisation** No evidence to suggest the product will be a respiratory sensitiser. Repeated exposure to oil mists may cause respiratory damage.

#### Skin sensitisation

**Skin sensitisation** Not expected to be a skin sensitizer based on information on components.

#### Carcinogenicity

**Carcinogenicity** This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP346 test

#### Reproductive toxicity

**Reproductive toxicity - fertility** No data available to suggest the product will cause reproductive toxicity.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Based on available data the classification criteria are not met.

#### Specific target organ toxicity - repeated exposure

**STOT - repeated exposure** Based on available data the classification criteria are not met.

#### Aspiration hazard

**Aspiration hazard** Kinematic viscosity > 20.5 mm<sup>2</sup>/s. The product viscosity is greater than the upper limit assigned for classification. Although not classified, the product contains mineral oil. If aspirated into the lungs e.g. through vomiting after ingestion, admit to hospital immediately.

#### General information

This product has low toxicity. Only large quantities are likely to have adverse effects on human health.

#### Inhalation

Unlikely to be hazardous by inhalation because of the low vapour pressure of the product at ambient temperature.

#### Ingestion

No harmful effects expected from quantities likely to be ingested by accident.

#### Skin contact

Skin irritation should not occur when used as recommended. Repeated exposure may cause skin dryness or cracking.

#### Eye contact

May cause temporary eye irritation.

#### Acute and chronic health hazards

Prolonged or repeated contact with used oil may cause serious skin diseases, such as dermatitis and skin cancer.

## Airforce 4000 ISO VG 46

### SECTION 12: Ecological Information

<b>Ecotoxicity</b>	Based on available data the classification criteria are not met. Not regarded as dangerous for the environment.
<b><u>12.1. Toxicity</u></b>	
<b>Toxicity</b>	Based on available data the classification criteria are not met. Not considered toxic to fish.
<b>Acute toxicity - aquatic invertebrates</b>	Based on available data the classification criteria are not met.
<b>Chronic toxicity - aquatic invertebrates</b>	Aquatic toxicity to Daphnia test data on the finished fluid showed this to be non-hazardous to the Aquatic environment. Further test data obtained on test fluids with higher concentrations of the active ingredients, also showed a negative aquatic toxicity to Daphnia at up to five times normal concentrations.
<b><u>12.2. Persistence and degradability</u></b>	
<b>Persistence and degradability</b>	The product contains mineral oil which has limited biodegradability in CEC test methods but will biodegrade slowly in aerobic water and sediments and is considered ultimately biodegradable.
<b>Stability (hydrolysis)</b>	The product is based on highly refined mineral oils that are considered stable to hydrolysis.
<b>Biodegradation</b>	The product is not considered readily biodegradeable, albeit the major constituents are expected to ultimately biodegrade.
<b>Biological oxygen demand</b>	Not determined.
<b>Chemical oxygen demand</b>	Not determined.
<b><u>12.3. Bioaccumulative potential</u></b>	
<b>Bioaccumulative potential</b>	Bioaccumulation is unlikely to be significant because of the low water-solubility of this product.
<b>Partition coefficient</b>	Not determined. log Kow:>7 Typical of mineral oil.
<b><u>12.4. Mobility in soil</u></b>	
<b>Mobility</b>	The product is non-volatile. The product is insoluble in water and will spread on the water surface.
<b>Henry's law constant</b>	Not determined.
<b><u>12.5. Results of PBT and vPvB assessment</u></b>	
<b>Results of PBT and vPvB assessment</b>	This product does not contain any substances classified as PBT or vPvB.
<b><u>12.6. Other adverse effects</u></b>	
<b>Other adverse effects</b>	None known.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

<b>General information</b>	This material and its container must be disposed of as hazardous waste. Disposal of waste via a licensed contractor.
<b>Disposal methods</b>	Waste, residues, empty containers, discarded work clothes and contaminated cleansing materials should be collected in designated containers labelled with their contents. Dispose of waste via a licensed waste disposal contractor.
<b>Waste class</b>	European waste catalogue (EWC) number = 13 02 08* (other engine, gear and lubricating oil)

## Airforce 4000 ISO VG 46

### SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

#### 14.1. UN number

Not applicable.

#### 14.2. UN proper shipping name

Not applicable.

#### 14.3. Transport hazard class(es)

No transport warning sign required.

#### 14.4. Packing group

Not applicable.

#### 14.5. Environmental hazards

##### **Environmentally hazardous substance/marine pollutant**

No.

#### 14.6. Special precautions for user

Not applicable.

#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78  
and the IBC Code

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### **National regulations**

Health and Safety at Work etc. Act 1974 (as amended).  
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).  
Control of Substances Hazardous to Health Regulations 2002 (as amended).  
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].

##### **EU legislation**

Dangerous Preparations Directive 1999/45/EC.  
Dangerous Substances Directive 67/548/EEC.  
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

##### **Guidance**

Workplace Exposure Limits EH40.  
Safety Data Sheets for Substances and Preparations.

#### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

#### Inventories



## Airforce 4000 ISO VG 46

### Canada - DSL/NDSL

All the ingredients are listed or exempt.

### US - TSCA

All the ingredients are listed or exempt.

### Australia - AICS

All the ingredients are listed or exempt.

### Korea - KECI

All the ingredients are listed or exempt.

### China - IECSC

All the ingredients are listed or exempt.

### Philippines – PICCS

All the ingredients are listed or exempt.

### New Zealand - NZIOC

All the ingredients are listed or exempt.

## SECTION 16: Other information

<b>Abbreviations and acronyms used in the safety data sheet</b>	<p>ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.</p> <p>CAS: Chemical Abstracts Service.</p> <p>DNEL: Derived No Effect Level.</p> <p>GHS: Globally Harmonized System.</p> <p>IATA: International Air Transport Association.</p> <p>IMDG: International Maritime Dangerous Goods.</p> <p>REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
<b>Revision comments</b>	NOTE: Lines within the margin indicate significant changes from the previous revision.
<b>Issued by</b>	Regulatory Affairs
<b>Revision date</b>	24/11/2016
<b>Revision</b>	7
<b>Supersedes date</b>	27/11/2015
<b>SDS number</b>	21476

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.