



SAFETY DATA SHEET

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product Name: **Friction Modifier**
Datasheet Number: AR9100 1. 2. 0
Chemical Name: Ester

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

Oil treatment

1.3 Details of the supplier of the safety data sheet

Name of Supplier: Archoil
Address of Supplier: Unit 27 Rookery Business Park
Silver Street
Besthorpe
Norfolk NR17 2LD. UK
Telephone: 0844 811 6147
Fax: 0844 811 6148
Responsible Person: Technical Manager
Email: support@archoil.eu

1.4 Emergency telephone number

+44 (0)844 811 6147 (office hours)

2 Hazards identification

2.1 Classification of the substance or mixture

- Classification (REGULATION (EC) No 1272/2008) [CLP/GHS]
- Eye Irrit. 2, H319
- Aquatic Chronic 4, H413
- Classification (67/548/EEC, 1999/45/EC)
- Xi; R36
- R53

2.2 Label elements



- Signal Word: Warning
- Symbols: GHS07

Hazard phrases

- Causes serious eye irritation.



2 Hazards identification (....)

- May cause long lasting harmful effects to aquatic life.

Precautionary Phrases

- Avoid release to the environment.
- Wash thoroughly after handling.
- Wear protective gloves/protective clothing/eye protection/face protection.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- If eye irritation persists: Get medical advice/attention.

2.3 Other hazards

- Marine pollutant

3 Composition/information on ingredients

3.1 Mixtures

Chemical Name	Concentration	CAS Number	EC Number	R/H Phrases*	Symbols
Potassium Tetraborate	1-10%	12045-78-2		H315, H319, H335 R36, R37, R38	GHS07 Xi
Fatty Acid Ester	10-50%	68440-09-5	270-434-5		
Methyl Oleate	20-40%	112-62-9	203-992-5	H319, H413 R36, R53	GHS07 Xi
Tetra ester	10-40%	68334-18-9	269-815-9		
Paraffin	20-50%	8012-95-1	232-384-2	H413 R53	GHS08 Xn

*See Section 16

4 First aid measures

4.1 Description of first aid measures

- If substance has got into eyes, immediately wash out with plenty of water
- If eye irritation persists: Get medical advice/attention.
- IF ON SKIN: Wash with plenty of soap and water.
- If skin irritation occurs: Get medical advice/attention.
- Inhalation is unlikely to occur
- IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

- May cause irritation

4.3 Indication of immediate medical attention and special treatment needed

- Treat symptomatically.



5 Fire-fighting measures

5.1 Extinguishing media

- In case of fire: use water, foam or dry agent for extinction

5.2 Special hazards arising from the substance or mixture

- No information available

5.3 Advice for firefighters

- Wear protective clothing as per section 8

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Evacuate the area and keep personnel upwind
- Wear protective clothing as per section 8

6.2 Environmental Precautions

- Avoid release to the environment.
- Do not allow to enter public sewers and watercourses
- If contamination of drainage systems or water courses is unavoidable, immediately inform appropriate authorities

6.3 Methods and material for containment and cleaning up

- Absorb spillage in inert material and shovel up

6.4 Reference to other sections

- See Section 8

7 Handling and storage

7.1 Precautions for safe handling

- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Keep away from heat and sources of ignition

7.2 Conditions for safe storage, including any incompatibilities

- Keep container tightly closed, in a cool, well ventilated place.
- Store in a dry place.

7.3 Specific end use(s)

- No information available.

8 Exposure controls/personal protection

8.1 Control parameters

- None assigned

8.2 Exposure controls

- Engineering controls should be provided to prevent the need for ventilation



8 Exposure controls/personal protection (....)

Occupational exposure controls

- Wear protective gloves/protective clothing/eye protection/face protection.



Gloves



Goggles



Suit

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Odour: Very small
- Appearance: brown, Liquid
- pH - not known
- Boiling point - not known
- Vapour pressure - not known
- Vapour density - not known
- Melting point - not known
- Water solubility - not known
- Fat solubility - not known
- Specific gravity 1 g/cm³
- Flash point 210 deg C (OC)

9.2 Other information

- No information available

10 Stability and reactivity

10.1 Reactivity

- No information available

10.2 Chemical stability

- No decomposition if stored normally.

10.3 Possibility of hazardous reactions

- No information available

10.4 Conditions to avoid

- Keep away from heat and sources of ignition

10.5 Incompatible materials

- Incompatible with acids and alkalis
- Incompatible with oxidizing substances

10.6 Hazardous Decomposition Products

- Decomposition products may include carbon oxides



11 Toxicological information

11.1 Information on toxicological effects

- May cause irritation

Inhalation

- In cases of severe exposure, irritation may develop

Contact with skin

- May cause irritation

Contact with eyes

- May cause irritation

Ingestion

- No information available

Carcinogenicity

- No information available

Teratogenicity

- No information available

Mutagenicity

- No information available

12 Ecological information

12.1 Toxicity

- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

12.2 Persistence and degradability

- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

12.3 Bioaccumulation Potential

- No information available

12.4 Mobility in soil

- No information available

12.5 Results of PBT and vPvB assessment

12.6 Other Adverse Effects

- Hazardous to the environment

13 Disposal considerations

13.1 Waste treatment methods

- Disposal should be in accordance with local, state or national legislation



13 Disposal considerations (....)

Classification

- The waste must be identified according to the List of Wastes (2000/532/EC)

14 Transport information

14.1 UN Number

N/A

14.2 UN Proper Shipping Name

N/A

14.3 Transport hazard class(es)

N/A

14.4 Packing group

N/A

14.5 Environmental hazards

- Marine pollutant

14.6 Special precautions for user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code

Other information

Road/Rail (ADR/RID)

Proper Shipping Name: N/A

ADR Hazard Class: N/A

Tunnel Code: N/A

ADR UN No.: N/A

ADR Packing Group: N/A

Sea (IMDG)

Proper Shipping Name: N/A

IMDG Hazard Class.: N/A

IMDG UN No.: N/A

IMDG Pack Group.: N/A

Air (ICAO/IATA)

Proper Shipping Name: N/A

ICAO Hazard Class.: N/A

ICAO Un No.: N/A

ICAO Packing Group.: N/A

15 Regulatory information

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

- Refer to current ADR Regulations
- Refer to current CPL Regulations
- Refer to current IATA Regulations

15.2 Chemical Safety Assessment



16 Other information

Text of R and S phrase codes used in this safety data sheet:- H315: Causes skin irritation.; H319: Causes serious eye irritation.; H335: May cause respiratory irritation.; H413: May cause long lasting harmful effects to aquatic life.; R36: Irritating to eyes; R37: Irritating to respiratory system; R38: Irritating to skin; R53: May cause long term adverse effects in the aquatic environment.

The above information is believed to be correct but does not purport to be all inclusive and shall only be used as a guide. The company will not be held liable for any damage resulting from handling or from contact with this product.