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SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: MIRACOOOL 101 NP
- Product Part Number: SOL048
- UFI: 3PWE-N031-U005-N834

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

- Use of the substance/mixture: Soluble metalworking fluid (concentrate)
- Use advised against: Do not use in any other application. For specific application information consult Technical Data Sheet.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Aztec Oils Ltd
- Address of Supplier: Intake Road
Bolsover Business Park,
Bolsover,
Derbyshire,
S44 6BB,
UK
- Telephone: +44 (0)1246 823007
Monday-Thursday 08:00 - 17:00
Friday 08:00 - 16:00, GMT/BST
- Email: Technical@aztecoils.co.uk
- Name of Supplier: Aztec Oils Europe BV
- Address of Supplier: Centraleweg 11-E
4931 NA
Geertruidenberg
THE NETHERLANDS
- Telephone: +31 (0)162-51 93 95
Monday - Friday 08:30 - 17:00
- Email: Info@aztecoilseurope.nl

1.4 Emergency telephone number

- Emergency Telephone: For UK and Northern Ireland Tel: 999 or 101., For ROI dial 999 or 112

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Skin Sens. 1, Eye Irrit. 2

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SECTION 2: Hazards identification (....)

2.2 Label elements



- Signal Word: Warning

2.2.1 Hazard statements

Causes serious eye irritation (H319).
May cause an allergic skin reaction (H317).

2.2.2 Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection (P280).
Contaminated work clothing should not be allowed out of the workplace (P272).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing (P305+P351+P338).
If eye irritation persists: Get medical advice/attention (P337+P313).
IF ON SKIN: Gently wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention. (P302 + 350: P332 + 313.)
Take off contaminated clothing and wash it before reuse (P362+P364).
Dispose of contents/container to an authorised waste collection point (P501)

2.3 Other hazards

- This product does not contain any PBT or vPvB substances.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

3.2.1 Distillates(Petroleum) Hydrotreated Light Naphthenic

CAS Number:	64742-53-6
EC Number:	265-156-6
REACH Registration Number:	01-2119480375-34
Index No.:	649-466-00-2
Specific Concentration Limits:	Not assigned.
M factor, acute:	Not applicable.
M factor, chronic:	Not applicable.
Concentration:	<80%
H Statements:	H304
Categories:	Asp. Tox. 1

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SECTION 3: Composition/information on ingredients (....)

3.2.2 Sulfonic acids, petroleum, sodium salts

CAS Number:	68608-26-4
EC Number:	271-781-5
REACH Registration Number:	01-2119527859-22
Index No.:	Not applicable
Specific Concentration Limits:	Not assigned.
M factor, acute:	Not applicable.
M factor, chronic:	Not applicable.
Concentration:	<4.5%
H Statements:	H319
Categories:	Eye Irrit. 2

3.2.3 Fatty acids, tall-oil, potassium salts

CAS Number:	61790-44-1
EC Number:	263-136-1
REACH Registration Number:	Not applicable
Index No.:	Not applicable
Specific Concentration Limits:	Not assigned.
M factor, acute:	Not applicable.
M factor, chronic:	Not applicable.
Concentration:	<7%
H Statements:	H315, H319
Categories:	Skin Irrit. 2; Eye Irrit. 2

3.2.4 Alcohol, C11-14 ISO-C13 rich

CAS Number:	68526-86-3
EC Number:	271-235-6
REACH Registration Number:	01-2119454259-32
Index No.:	Not applicable
Specific Concentration Limits:	Not assigned.
M factor, acute:	1
M factor, chronic:	Not applicable.
Concentration:	<1.5%
H Statements:	H315, H400, H411
Categories:	Skin Irrit. 2; Aquatic Acute 1; Aquatic Chronic 2

3.2.5 2-(2-butoxyethoxy)ethanol

CAS Number:	112-34-5
EC Number:	203-961-6

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SECTION 3: Composition/information on ingredients (....)

REACH Registration Number: 01-2119475104-44

Index No.: 603-096-00-8

Specific Concentration Limits: Not assigned.

M factor, acute: Not applicable.

M factor, chronic: Not applicable.

Concentration: <1.5%

H Statements: H319

Categories: Eye Irrit. 2

3.2.6 2-methylisothiazol-3(2H)-one

CAS Number: 2682-20-4

EC Number: 220-239-6

REACH Registration Number: 01-2120764690-50

Index No.: 613-326-00-9

Specific Concentration Limits: Skin Sens. 1A; H317: C ≥ 0,0015 %

M factor, acute: 10

M factor, chronic: 1

Concentration: <0.1%

H Statements: H301, H311, H314, H317, H318, H330, H400, H410

Categories: Acute Tox. 2, Acute Tox. 3, Skin Corr. 1B, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1

3.2.7 1,2-benzisothiazol-3(2H)-one

CAS Number: 2634-33-5

EC Number: 220-120-9

REACH Registration Number: 01-2120761540-60

Index No.: 613-088-00-6

Specific Concentration Limits: Skin Sens. 1; H317: C ≥ 0,05 %

M factor, acute: 1

M factor, chronic: Not applicable.

Concentration: <0.1%

H Statements: H302, H315, H317, H318, H330, H400, H411

Categories: Acute Tox. 2, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 2

SECTION 4: First aid measures**4.1 Description of first aid measures****4.1.1 Inhalation**

SECTION 4: First aid measures (....)

If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

4.1.2 Contact with eyes

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses (if easy to do so). Get medical attention.

4.1.3 Contact with skin

Wash skin thoroughly with soap and water or use recognised skin cleanser. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention if symptoms occur.

4.1.4 Ingestion

Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

4.2.1 Ingestion

May cause gastro-intestinal disturbances.

4.2.2 Contact with skin

May cause an allergic skin reaction.

4.2.3 Contact with eyes

Causes serious eye irritation.

4.2.4 Inhalation

May cause respiratory irritation. The following symptoms may occur: Cough, Dizziness, Headache.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment should be symptomatic and directed to relieving any effects.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- 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

- If heated or in cases of fire, pressure in a vessel will increase and container may burst.
- Combustion products may include the following: carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide) nitrogen oxides (NO, NO₂ etc.)

5.3 Advice for firefighters

SECTION 5: Firefighting measures (....)

- Promptly isolate and secure the scene, remove all unnecessary and untrained persons from the vicinity if there is a fire. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European Standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures**Spillage causes slippery surface****6.1 Personal precautions, protective equipment and emergency procedures**

- Stop any leak if it is safe to do so.
- Adopt best manual handling considerations when handling, carrying and dispensing.
- Appropriate protective equipment must be worn when handling a spill of this material. See SECTION 8, Exposure Controls/Personal Protection, for recommendations. If exposed to material during clean-up operations, see SECTION 4, First Aid Measures, for actions to follow.

6.2 Environmental precautions

- Do not allow product to enter drains. Prevent further spillage if safe. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

- Stop any leak if it is safe to do so.
- Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for disposal by an appropriate method.
- Dispose of in compliance with all local and national regulations.

6.4 Reference to other sections

- See Section 1 for emergency contact information.
- See Section 5 for firefighting measures.
- See Section 8 for information on appropriate personal protective equipment.
- See Section 12 for environmental precautions.
- See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage**7.1 Precautions for safe handling**

- Use appropriate personal protective equipment.
- Avoid frequent or prolonged skin contact.
- Good hygienic practices should be observed.
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

- Store in accordance with local regulations.

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SECTION 7: Handling and storage (....)

- Keep in a cool, dry, well ventilated area. Keep containers tightly closed. Store in correctly labelled containers.
- Store between the following temperatures: 5 to 40°C (41 to 104°F). Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Protect from freezing. Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/containers designed for use with this product. Do not store in unlabelled containers.

7.3 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

- If this product contains ingredients with exposure limits, personal and/or workplace atmosphere monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Substances

Chemical Name	WEL (short term)	WEL (long term)
Highly refined mineral oil	# mg/m ³ (UK) # mg/m ³ (IE) 10 mg/m ³ (ES)	5 mg/m ³ (UK) 5 mg/m ³ (IE) 5 mg/m ³ (ES)
2-(2-butoxyethoxy)ethanol	101.2 mg/m ³ (UK) 101.2 mg/m ³ (IE) 101.2 mg/m ³ (ES)	67.5 mg/m ³ (UK) 67.5 mg/m ³ (IE) 67.5 mg/m ³ (ES)

Substances

Chemical Name	DNEL (Industry; inhalational, long term systemic effects)	DNEL (Industry; dermal, long term systemic effects)	DNEL (Industry; oral, long term systemic effects)	DNEL (Consumer; inhalational, long term local effects)
Sulfonic acids, petroleum, sodium salts	0.66 mg/m ³	3.33 mg/kg bw/day	- mg/kg bw/day	- mg/m ³
2-methylisothiazol-3(2H)-one	- mg/m ³	- mg/kg bw/day	- mg/kg bw/day	0.021 mg/m ³
1,2-benzisothiazol-3(2H)-one	6.81 mg/m ³	0.966 mg/kg bw/day	- mg/kg bw/day	- mg/m ³
2-(2-butoxyethoxy)ethanol	- mg/m ³	- mg/kg bw/day	- mg/kg bw/day	67.5 mg/m ³
Alcohol, C11-14 ISO-C13 rich	147.9 mg/m ³	417 mg/kg bw/day	# mg/kg bw/day	# mg/m ³

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

Substances

Chemical Name	DNEL (Consumer; inhalational, long term systemic effects)	DNEL (Consumer; dermal, long term systemic effects)	DNEL (Consumer; oral, long term systemic effects)	DNEL (Consumer; inhalational, long term local effects)
Sulfonic acids, petroleum, sodium salts	0.33 mg/m ³	1.667 mg/kg bw/day	0.833 mg/kg bw/day	- mg/m ³
2-methylisothiazol- 3(2H)-one	- mg/m ³	- mg/kg bw/day	0.027 mg/kg bw/day	0.021 mg/m ³
1,2-benzisothiazol- 3(2H)-one	1.2 mg/m ³	0.345 mg/kg bw/day	- mg/kg bw/day	- mg/m ³
2-(2-butoxyethoxy)ethanol	- mg/m ³	- mg/kg bw/day	6.25 mg/kg bw/day	- mg/m ³
Alcohol, C11-14 ISO-C13 rich	43.5 mg/m ³	250 mg/kg bw/day	25 mg/kg bw/day	- mg/m ³

8.2 Exposure controls

- A full risk assessment should be undertaken before handling this material.



- Engineering Controls:
- Provide adequate ventilation. Avoid inhalation of vapours and spray/mists. Observe any occupational exposure limits for the product or ingredients.
- Eye Protection:
If contact is likely, safety glasses are recommended.
- Hand protection:
Because specific work environments and material handling practices vary, safety procedures should be developed for each application. The right choice of protective gloves depends on the chemicals used and the working conditions and use. Recommended: Nitrile or alternative suitable gloves."Breakthrough time" shows how long the gloves can have effective resistance. Always consult with your glove supplier for the latest breakthrough technical information.
- Skin and Body Protection:
Wear appropriate clothing as protection against splashing.
In accordance with good industrial hygiene practices, precautions should be taken to avoid skin contact.
- Hygiene Measures:
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking and/or smoking.
Routinely wash work clothing and protective equipment to remove contaminants.
- Respiratory Protection:
No Special requirements under ordinary conditions of use and with adequate ventilation.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Amber, brown
- Physical state: Liquid
- Odour: Characteristic odour
- Density: 0.99 g/cm³ at 15 °C
- pH: 9.7 at 5 % concentration
- Solubility in water: Emulsifies in water.
- Freezing point/Range: No information available.
- Boiling Point/Range: No information available.
- Flashpoint: No information available.
- Autoignition Temperature: >250°C

9.2 Other information

- No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

- No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

10.2 Chemical stability

- Considered stable under normal conditions

10.3 Possibility of hazardous reactions

- None under normal processing.
- Hazardous polymerisation does not occur.

10.4 Conditions to avoid

- Avoid ignition sources. Heat. Sparks. Open flame. Direct sunlight. Extremely high or low temperatures.

10.5 Incompatible materials

- Incompatibility with other materials: Incompatible with acid, Incompatible with oxidizing substances

10.6 Hazardous decomposition products

- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

No experimental data available.

11.1 Information on toxicological effects



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SECTION 11: Toxicological information (....)

Substances

Chemical Name	LC ₅₀ (inhalation, rat)	LD ₅₀ (dermal, rabbit)	LD ₅₀ (oral, rat)	LD ₅₀ (skin, rat)
2-methylisothiazol- 3(2H)-one	0.11 mg/l	242 mg/kg	120 mg/kg	- mg/kg
1,2-benzisothiazol- 3(2H)-one	- mg/l	- mg/kg	490 mg/kg	2000 mg/kg

11.1.1 Contact with eyes

Causes serious eye irritation.

11.1.2 Contact with skin

Sensitisation: May cause an allergic skin reaction (H317).

11.1.3 Ingestion

May cause gastro-intestinal disturbances

11.1.4 Inhalation

May cause respiratory irritation. The following symptoms may occur: Cough, Dizziness, Headache.

11.2 Information on other hazards

- No information available.

SECTION 12: Ecological information

12.1 Toxicity

- No experimental data available.

Substances

Chemical Name	EC ₅₀ (daphnia)	LC ₅₀ (fish)	IC ₅₀ (algae)
2-methylisothiazol- 3(2H)-one	0.934 mg/l (48hr)	4.77 mg/l (96 hr)	0.138 mg/l (120 hr)
1,2-benzisothiazol- 3(2H)-one	2.9 mg/l (48hr)	16.7 mg/l (96 hr)	0.11 mg/l (72hr)

12.2 Persistence and degradability

- Not readily biodegradable.

12.2.1 Distillates(Petroleum) Hydrotreated Light Naphthenic

Not readily biodegradable.

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SECTION 12: Ecological information (....)**12.2.2 Alcohol, C11-14 ISO-C13 rich**

Readily biodegradable

12.2.3 2-methylisothiazol-3(2H)-one

Not readily biodegradable.

12.2.4 1,2-benzisothiazol-3(2H)-one

Not readily biodegradable.

12.2.5 2-(2-butoxyethoxy)ethanol

Readily biodegradable.

12.3 Bioaccumulative potential

- No experimental data available.

12.4 Mobility in soil

- Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment**12.5.1 Distillates(Petroleum) Hydrotreated Light Naphthenic**

Not Classified as PBT/vPvB by current EU criteria.

12.5.2 Alcohol, C11-14 ISO-C13 rich

Not Classified as PBT/vPvB by current EU criteria.

12.5.3 2-methylisothiazol-3(2H)-one

Not Classified as PBT/vPvB by current EU criteria.

12.5.4 1,2-benzisothiazol-3(2H)-one

Not Classified as PBT/vPvB by current EU criteria.

12.5.5 2-(2-butoxyethoxy)ethanol

Not Classified as PBT/vPvB by current EU criteria.

12.6 Endocrine disrupting properties

- Not applicable.

12.7 Other adverse effects

- No information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

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SECTION 13: Disposal considerations (....)

- This material and its containers must be disposed of as hazardous waste. Dispose of waste via a licensed waste disposal contractor.
- Where possible, arrange for product to be recycled.

13.2 Classification

- For classification and assessment of waste, refer to technical guidance WM3 (Appendix A) or EWC (European Waste Catalogue) codes for hazardous and non-hazardous waste, where appropriate.

SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: Not applicable.

14.2 UN proper shipping name

- Proper Shipping Name: Not applicable.

14.3 Transport hazard class(es)

- Hazard Class: Not applicable.

14.4 Packing group

- Packing Group: Not applicable.

14.5 Environmental hazards

- Not classified.

14.6 Special precautions for user

- Not applicable.

14.7 Maritime transport in bulk according to IMO instruments

- Not applicable.

SECTION 15: Regulatory information

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

- This Safety Data Sheet is provided in compliance with the EC Regulations 1907/2006, 1272/2008, 2015/830 and 2020/878
- This SDS has been compiled according to UK SI 2019/758 and EC 1272/2008 as amended in the UK.

15.2 Chemical safety assessment

- A chemical safety assessment (CSA) for this product has not yet been completed

SECTION 16: Other information

Text not given with phrase codes where they are used elsewhere in this safety data sheet:- H301: Toxic if swallowed. H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H311: Toxic in contact with skin. H314: Causes severe

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SECTION 16: Other information (....)

skin burns and eye damage. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H319: Causes serious eye irritation. H330: Fatal if inhaled. H400: Very toxic to aquatic life. H410: Very toxic to aquatic life with long lasting effects. H411: Toxic to aquatic life with long lasting effects.

Disclaimer

The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. 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 other process