Revision: 13 Mar 2021

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Miracool 201 XFP
- Product Part Number: SOL041

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

- Use of the substance/mixture: Metalworking Fluid Soluble (Concentrate), For Industrial Use Only
- 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 Europe BV
- Address of Supplier: Centraleweg 11-E
  4931 NA
  Geertruidenberg
  THE NETHERLANDS
- Telephone: +31 (0)162-51 93 95
  Mon - Fri 08:30 - 17:00
- Email: Info@aztecoilseurope.nl
- Name of Supplier: Aztec Oils Ltd
- Address of Supplier: Intake Road,
  Bolsover Business Park,
  Bolsover,
  Derbyshire,
  S44 6BB,
  UK
- Telephone: +44 (0)1246 823007
  Mon-Thurs 08:00 - 17:00
  Fri 08:00 - 16:00, GMT/BST
- Email: Technical@aztecoils.co.uk

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 Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3

2.2 Label elements

Miracool 201 XFP

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SECTION 2: Hazards identification (....)

- Signal Word: Warning

2.2.1 Hazard statements

Causes skin irritation (H315).
Causes serious eye irritation (H319).
Harmful to aquatic life with long lasting effects (H412).

2.2.2 Precautionary statements

Wear protective gloves/protective clothing/eye protection/face protection (P280).
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easay to do so. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
IF ON SKIN: Wash with plenty of water/ soap and water, if irritation occurs, get medical advice/ attention.
Wash hands thoroughly after handling.
Avoid release to the environment (P273).
Dispose of contents and/or container in accordance with local/ national regulations.

2.3 Other hazards

- Contains 3-iodo-2-propnyl-butylcarbamate. May produce an allergic reaction.
- This product is not identified as a PBT/vPvB according to current criteria.

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 applicable
M factor:	Not applicable
Concentration:	30 - 60%
H Statements:	H304
Categories:	Asp. Tox. 1

The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

3.2.2 Amine carboxylate - ionic mixture (Annex V exempt)

CAS Number:	Not available
EC Number:	Not available
REACH Registration Number:	Not applicable

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

Index No.:	Not applicable
Specific concentration limits:	Not applicable
M factor:	Not applicable
Concentration:	10 - 30%
H Statements:	H315, H319
Categories:	Skin Irrit. 2, Eye Irrit. 2

3.2.3 Alkylether carboxylic acid neutralised (polymer)

CAS Number:	Not available
EC Number:	Not available
REACH Registration Number:	Polymer
Index No.:	Not applicable
Specific concentration limits:	Not applicable
M factor:	Not applicable
Concentration:	1 - 5%
H Statements:	H315, H319
Categories:	Skin Irrit. 2, Eye Irrit. 2

3.2.4 2-(2-butoxyethoxy)ethanol

CAS Number:	112-34-5
EC Number:	203-961-6
REACH Registration Number:	01-2119475104-44
Index No.:	603-096-00-8
Specific concentration limits:	Not applicable
M factor:	Not applicable
Concentration:	1 - 5%
H Statements:	H319
Categories:	Eye Irrit. 2

3.2.5 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 applicable
M factor:	1
Concentration:	<1%
H Statements:	H315, H400, H411
Categories:	Skin Irrit. 2, Aquatic Acute 1, Aquatic Chronic 2

3.2.6 3-Iodo-2-propynyl butylcarbabamate

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

CAS Number:	55406-53-6
EC Number:	259-627-5
REACH Registration Number:	01-2120762115-60
Index No.:	616-212-00-7
Specific concentration limits:	Not applicable
M factor:	10, 1 (chronic)
Concentration:	<1%
R/H Phrases:	H302,H318, H317, H302, H331, H372 (larynx), H400, H410
Categories:	Acute Tox. 3, Acute Tox. 4, Eye Dam. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1.1 Inhalation

If inhaled, remove to fresh air. Get medical attention if symptoms appear. In case of inhalation of decomposition products in a fire, symptoms may be delayed.

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

Causes redness and irritation

4.2.3 Contact with eyes

Causes severe 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, NO_2 etc.)

5.3 Advice for firefighters

- 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).
- Avoid release to the environment.

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.
- Avoid release to the environment.
- Dispose of contents and/or container in accordance with local/ national regulations.

7.2 Conditions for safe storage, including any incompatibilities

- Store in accordance with local regulations.
- 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)	STEL	WEL
Distillates(petroleum) hydrotreated light naphthenic		5mg/m3		5 mg/m³ (IE)
2-(2-butoxyethoxy)ethanol	101.2 mg/m3	67.5 mg/m3	101.2 mg/m³ (IE)	67.5 mg/m³ (IE)

Substances

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

Chemical Name	DNEL (Industry; inhalational, long term systemic effects)	DNEL (Industry; dermal, long term systemic effects)	DNEL (Industry; oral, long term systemic effects)	DNEL (Industry; inhalational, long term local effects)
2-(2-butoxyethoxy)ethanol				67.5 mg/m3
3-Iodo-2-propynyl butylcarbabamate	0.023 mg/m3	2 mg/kg bw/day		

Substances

Chemical Name	DNEL (Consumer; inhalational, long term systemic effects)	DNEL (Consumer; dermal, long term systemic effects)	DNEL (Consumer; oral, long term systemic effects)
2-(2-butoxyethoxy)ethanol	-	-	6.25 mg/kg bw/day

8.2 Exposure controls

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


- Engineering Controls
- Appropriate engineering controls:
  Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
  All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled.
  Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.
  The final choice of protective equipment will depend upon a risk assessment.
- Eye Protection:
  If contact is likely, safety glasses are recommended.

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

- Hand Protection:
  The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use.
  Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).
  Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.
  Recommended: Nitrile gloves.

  Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account.
  Consult with your glove supplier for up-to-date technical information.

  Gloves with a minimum breakthrough time of 240 minutes are recommended. Gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.
- Skin and Body Protection
  Wear appropriate clothing as protection against splashing.
  In accordance with good industrial hygiene practices, precautions should be taken to minimise 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.
  In case of insufficient ventilation, wear suitable respiratory equipment.
  The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application.
  Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.
- Wear protective gloves/protective clothing/eye protection/face protection.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance:	Straw to light brown.
- Physical state:	Liquid
- Odour:	Characteristic.
- Density:	0.91 g/cm³ at 15 °C
- pH:	8.8 at 5 % concentration
- Solubility:	Soluble in water
- Viscosity (kinematic):	No data availablecSt at
- Freezing point/Range:	No data available.
- Boiling Point/Range:	No data available
- Flashpoint:	>100°C

SECTION 9: Physical and chemical properties (....)

- Autoignition Temperature: >250°C

9.2 Other information

- The figures in this section are for guidance only please always use them in conjunction with the technical data sheet.

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 excessive heat for prolonged periods of time. Avoid frost.

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

11.1 Information on toxicological effects

Substances

Chemical Name	**LC_{50} (inhalation, rat)**	**LD_{50} (dermal, rabbit)**	**LD_{50} (oral, rat)**
Alcohol, C11-14 ISO-C13 rich	12.2 mg/m3	>2000 mg/kg bw	2000 mg/kg bw
3-Iodo-2-propynyl butylcarbabamate	>6.89 mg/m3	2000 mg/kg bw	1056 mg/kg bw
2-(2-butoxyethoxy)ethanol		2764 mg/kg bw	2410 mg/kg bw

- Skin contact: Defatting to the skin. May cause skin dryness and irritation.
- Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

SECTION 11: Toxicological information (....)

- Eye contact: Causes serious irritation
- Ingestion: Irritating to mouth, throat and stomach. Ingestion of large quantities may cause nausea and diarrhoea.
- Inhalation: May cause irritation

11.2 Information on other hazards

- No information available

SECTION 12: Ecological information

12.1 Toxicity

Substances

Chemical Name	EC_{50} (daphnia)	LC_{50} (fish)	IC_{50} (algae)
3-Iodo-2-propynyl butylcarbabamate	0.04 mg/l (48 hr)	0.067 mg/l (96 hr)	Unknown mg/l (72 hr)
Alcohol, C11-14 ISO-C13 rich	0.71 mg/l (48 hr)	0.42 mg/l (96 hr)	3.2 mg/l (72 hr)
2-(2-butoxyethoxy)ethanol	1101 mg/l (48 hr)	1300 mg/l (96 hr)	1101 mg/l (72 hr)

12.2 Persistence and degradability

- Expected to be inherently biodegradable.

12.2.1 3-Iodo-2-propynyl butylcarbabamate
Not readily biodegradable.

12.2.2 Alcohol, C11-14 ISO-C13 rich
Readily biodegradable.

12.2.3 2-(2-butoxyethoxy)ethanol
Readily biodegradable.

12.3 Bioaccumulative potential

- No bioaccumulation potential.

12.4 Mobility in soil

- Spillages may penetrate the soil causing ground water contamination.
- Liquid. Emulsifies in water.

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 3-Iodo-2-propynyl butylcarbabamate
Not Classified as PBT/vPvB by current EU criteria.

SECTION 12: Ecological information (....)

12.5.3 Alcohol, C11-14 ISO-C13 rich
Not Classified as PBT/vPvB by current EU criteria.

12.5.4 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 known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Dispose of in compliance with all local and national regulations.

13.2 Classification

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

SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: Not regulated.

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 available.

14.7 Maritime transport in bulk according to IMO instruments

- Not available.

SECTION 15: Regulatory information

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

- Regulation (EC) No 1907/2006 of the European Parliament and 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 the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

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:- H302: Harmful if swallowed. H304: May be fatal if swallowed and enters airways. H315: Causes skin irritation. H317: May cause an allergic skin reaction. H318: Causes serious eye damage. H319: Causes serious eye irritation. H331: Toxic if inhaled. H372: Causes damage to organs through prolonged or repeated exposure. 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.

--- end of safety datasheet ---