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

1.1 Product identifier
Die Casting Mould Cleaner

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

1.3 Details of the supplier of the safety data sheet
Supplier (manufacturer/importer/only representative/downstream user/distributor)
Bio-Circle Surface Technology GmbH

Street : Berensweg 200

Postal code/city : 33334 Gütersloh

Telephone : +49 5241 9443 0

Telefax : +49 5241 9443 44

Information contact : labor@bio-circle.de

1.4 Emergency telephone number
+49 5241 9443 51 during normal office hours

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Hazard pictograms

Health hazard (GHS08)

Signal word

Danger

Hazard components for labelling

WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5

Hazard statements

H304	May be fatal if swallowed and enters airways.

Precautionary statements

P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/....
P331	Do NOT induce vomiting.
P405	Store locked up.

Additional information
None

2.3 Other hazards
None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Hazardous ingredients

WHITE MINERAL OIL (PETROLEUM) ; REACH registration No. : 01-2119487078-27-XXXX ; EC No. : 232-455-8; CAS No. : 8042-47-5

Weight fraction : ≥ 50 - < 100 %

Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304

(2-METHOXYMETHYLETHOXY)PROPANOL ; REACH registration No. : 01-2119450011-60-XXXX ; EC No. : 252-104-2; CAS No. : 34590-94-8

Weight fraction : ≥ 5 - < 10 %

Classification 1272/2008 [CLP] : Substance with a common (EC) occupational exposure limit value.

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

When in doubt or if symptoms are observed, get medical advice. Remove contaminated, saturated clothing immediately.

Following inhalation

In case of respiratory tract irritation, consult a physician. Remove casualty to fresh air and keep warm and at rest.

In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Rub greasy ointment into the skin.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

May be fatal if swallowed and enters airways.

4.3 Indication of any immediate medical attention and special treatment needed

None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Extinguishing powder Carbon dioxide (CO2) Sand Nitrogen Extinguishing blanket

Unsuitable extinguishing media

Full water jet

5.2 Special hazards arising from the substance or mixture

None

5.3 Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers. Apply foam in abundant quantities since some of it gets destroyed by the product. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4 Additional information

Fire transmission possible. Burning produces heavy smoke. Use water spray jet to protect personnel and to cool endangered containers. Remove product from area of fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition.

6.2 Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

Safe handling: see section 7
Personal protection equipment: see section 8
Disposal: see section 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Keep container tightly closed. Ensure adequate ventilation of the storage area.

7.2 Conditions for safe storage, including any incompatibilities

Ensure adequate ventilation of the storage area. Keep container tightly closed in a cool, well-ventilated place.

Hints on joint storage

Storage class (TRGS 510) : 10

Keep away from

Keep away from sources of ignition. - No smoking. Take precautionary measures against static discharges.

7.3 Specific end use(s)

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

(2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8

Limit value type (country of origin) :	TRGS 900 (D)
Limit value :	50 ppm / 310 mg/m³
Peak limitation :	1(I)
Version :	02.04.2014
Limit value type (country of origin) :	TWA (EC)
Limit value :	50 ppm / 308 mg/m³
Remark :	H
Version :	08.06.2000

DNEL/DMEL and PNEC values

DNEL/DMEL

Limit value type :	DNEL worker (systemic) ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Exposure route :	Inhalation
Exposure frequency :	Long-term (repeated)
Limit value :	310 mg/m³
Limit value type :	DNEL worker (systemic) ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Exposure route :	Dermal
Exposure frequency :	Long-term (repeated)

Limit value : 65 mg/kg

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Wear suitable safety goggles in case of splash.

Suitable eye protection

EN 166.

Skin protection

Hand protection

Suitable gloves type : EN 374.

Suitable material : Butyl caoutchouc (butyl rubber)

Breakthrough time (maximum wearing time) : 480 min.

Thickness of the glove material : 0.3 mm.

Remark : The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Respiratory protection

Respiratory protection necessary at: exceeding exposure limit values

Suitable respiratory protection apparatus

Combination filtering device (EN 14387)

General health and safety measures

Do not put any product-impregnated cleaning rags into your trouser pockets. When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately.

8.3 Additional information

No tests have been performed. Selection made for preparations according to the best available knowledge and information on ingredients. In the case of preparations the resistance of glove materials cannot be calculated in advance so it has to be tested before use.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : colourless

Odour : vanilla

Safety relevant basis data

Solidifying point :	(1013 hPa)	ca.	-25	℃
Flash point :		>	100	℃
Lower explosion limit :			not applicable	
Upper explosion limit :			not applicable	
Density :	(20 ℃)	ca.	0,81	g/cm^3

pH :			not applicable	
Cinematic viscosity :	(20 °C)	ca.	6,48	mm^2/s
Maximum VOC content (EC) :			5	Wt %
Maximum VOC content (Switzerland) :			5	Wt %

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

Violent reaction with: Oxidising agent, strong. Formation of: Peroxide.

10.2 Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3 Possibility of hazardous reactions

No information available.

10.4 Conditions to avoid

No information available.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Method :	OECD 401
Parameter :	LD50 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Method :	OECD 401

Acute dermal toxicity

Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	> 2000 mg/kg
Parameter :	LD50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 5000 mg/kg
Method :	OECD 402
Parameter :	LD50 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Exposure route :	Dermal
Species :	Rat
Effective dose :	> 19020 mg/kg

Method :	OECD 402

Acute inhalation toxicity

Parameter :	ATEmix calculated
Exposure route :	Inhalation
Effective dose :	> 20 mg/m³
Parameter :	LC50 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 275 ppm
Exposure time :	7 h
Method :	OECD 403
Parameter :	LC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 5000 mg/m³
Exposure time :	4 h
Method :	OECD 403

11.2 Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

11.3 Other adverse effects

Frequently or prolonged contact with skin may cause dermal irritation. Do not breathe gas/fumes/vapour/spray.

11.4 Additional information

Preparation not tested. The statement is derived from the properties of the single components.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LC50 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Species :	Poecilia reticulata (Guppy)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 1000 mg/l
Exposure time :	96 h
Evaluation :	Harmless to fish up to the concentration tested.
Method :	OECD 203
Parameter :	LC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Leuciscus idus (golden orfe)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Evaluation :	Harmless to fish up to the concentration tested.
Method :	OECD 203
Parameter :	LC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 100 mg/l
Exposure time :	48 h
Evaluation :	Harmless to daphnia up to the tested concentration.
Method :	OECD 202
Parameter :	LC50 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	1919 mg/l
Exposure time :	48 h

Evaluation :	Harmless to daphnia up to the tested concentration.
Method :	OECD 202
Parameter :	EC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	> 1000 mg/l
Exposure time :	21 d
Method :	OECD 211

Acute (short-term) algae toxicity

Parameter :	EC50 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Species :	Pseudokirchneriella subcapitata
Effective dose :	> 969 mg/l
Exposure time :	72 h
Evaluation :	Harmless to algae up to the concentration tested.
Method :	OECD 201

Bacteria toxicity

Parameter :	EC50 (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Species :	Bacteria toxicity
Effective dose :	> 1000 mg/l
Exposure time :	40 h
Parameter :	EC10 ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Species :	Pseudomonas putida
Evaluation parameter :	Bacteria toxicity
Effective dose :	4168 mg/l
Exposure time :	18 h

12.2 Persistence and degradability

Biodegradation

Parameter :	Biodegradation (WHITE MINERAL OIL (PETROLEUM) ; CAS No. : 8042-47-5)
Inoculum :	Degree of elimination
Evaluation parameter :	Aerobic
Effective dose :	24 %
Exposure time :	28 d
Method :	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C
Parameter :	DOC reduction ((2-METHOXYMETHYLETHOXY)PROPANOL ; CAS No. : 34590-94-8)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Effective dose :	96 %
Exposure time :	28 d
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D

12.3 Bioaccumulative potential

No indication of bioaccumulation potential.

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

None

SECTION 13: Disposal considerations

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the

industry and process. List of proposed waste codes/waste designations in accordance with EWC

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

13 02 05* - mineral-based non-chlorinated engine, gear and lubricating oils.

Waste code packaging

15 01 02 - plastic packaging.

13.2 Additional information

These codes are assigned based upon the most common uses for this material and may not reflect contaminants resulting from actual use.

SECTION 14: Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es)

No dangerous goods in sense of this transport regulation.

14.4 Packing group

No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards

No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

EU legislation

Other regulations (EU)

Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

National regulations

AT: Labelling according to Austrian regulations (Chemikaliengesetz/ChemV).
CH: Chemikalienverordnung (ChemV) and Chemikalien-Risikoreduktions-Verordnung (Chem RRV) are complied.

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Other regulations, restrictions and prohibition regulations

Betriebssicherheitsverordnung (BetrSichV)

No flammable liquid according to BetrSichV.

15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

16.1 Indication of changes

None

16.2 Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (Europäisches Übereinkommen über die Beförderung gefährlicher Güter auf der Straße)
AOX: adsorbierbare organisch gebundene Halogene
CAS: Chemical Abstracts Service (Unterabteilung der American Chemical Society)
CLP: Verordnung (EG) Nr. 1272/2008 über die Einstufung, Kennzeichnung und Verpackung von Stoffen und Gemischen (Classification Labelling and Packaging)
EAK / AVV: europäischer Abfallartenkatalog / Abfallverzeichnis-Verordnung
ECHA: Europäische Chemikalienagentur (European Chemicals Agency)
EINECS: : Altstoffverzeichnis (European Inventory of Existing Commercial Chemical Substances)
GHS: Global harmonisiertes System zur Einstufung und Kennzeichnung von Chemikalien (Globally Harmonized System of Classifiaction and Labelling of Chemicals)
IATA: Internationale Luftverkehrs-Vereinigung (International Air Transport Association)
ICAO: Internationale Zivilluftfahrtorganisation (International Civil Aviation Organization)<
IMDG: Gefahrgutkennzeichnung für gefährliche Güter im Seeschiffverkehr (International Maritime Code for Dangerous Goods)
RID: Regelung zur internationalen Beförderung gefährlicher Güter im Schienenverkehr (Règlement concernant le transport international ferroviaire de marchandises dangereuses)
TRGS: Technische Regel für den Umgang mit Gefahrstoffen
VbF: Verordnung über brennbare Flüssigkeiten
VOC: flüchtige organische Verbindung (volatile organic compound)
VwVwS: Verwaltungsvorschrift wassergefährdender Stoffe
WGK: Wassergefährdungsklasse

16.3 Key literature references and sources for data

DGUV: GESTIS-Stoffdatenbank
ECHA: Classification And Labelling Inventory
ECHA: Pre-registered Substances
ECHA: Registered Substances
EC_Safety Data Sheet of Suppliers
ESIS: European Chemical Substances Information System
GDL: Gefahrstoffdatenbank der Länder
UBA Rigoletto: Wassergefährdende Stoffe
Regulation (EC) No. 1907/2006 of the European Parliament and of the Council
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

No information available.

16.5 Relevant H- and EUH-phrases (Number and full text)

H304 May be fatal if swallowed and enters airways.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.