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

1.1 Product identifier

Anti Rust Wax
UFI: 9050-H0T8-300Y-6WWG

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

Relevant identified uses

Sectors of use [SU]
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
Industrial uses
Products Category [PC]
PC-PNT-OTH - Other paints and coating materials
Technical Functions (TF)
Corrosion inhibitor

Uses advised against

Do not use for medical-clinical purposes.

1.3 Details of the supplier of the safety data sheet

Supplier

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 :

Product application:	ae@bio-circle.de
Orders:	www.bio-circle.de service@bio-circle.de
Current safety data sheet:	www.bio-circle.de [DE + EN] service@bio-circle.de
Questions about the contents of the safety data sheet:	ehs@bio-circle.de

1.4 Emergency telephone number

+49 5241 9443 51 during normal office hours
(Monday to Thursday from 8 am to 4 pm and Friday from 8 am to 3 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Flam. Liq. 3 ; H226 - Flammable liquids : Category 3 ; Flammable liquid and vapour.
STOT SE 3 ; H336 - STOT-single exposure : Category 3 ; May cause drowsiness or dizziness.
Asp. Tox. 1 ; H304 - Aspiration hazard : Category 1 ; May be fatal if swallowed and enters airways.
Aquatic Chronic 3 ; H412 - Hazardous to the aquatic environment : Chronic 3 ; Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Flame (GHS02) · Health hazard (GHS08) · Exclamation mark (GHS07)

Signal word

Danger

Hazard components for labelling

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Hydrocarbons, C8-C9, isoalkanes ; CAS No. : 246538-71-6
Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8

Hazard statements

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P312	Call a POISON CENTER/doctor/... if you feel unwell.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/....
P331	Do NOT induce vomiting.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

Supplemental hazard information

EUH066	Repeated exposure may cause skin dryness or cracking.

Special rules for supplemental label elements for certain mixtures

EUH208	Contains Sulfonic acids, petroleum, calcium salts, TBN < 300.May produce an allergic reaction.

2.3 Other hazards

Adverse human health effects and symptoms

This product does not contain any substance in concentrations of 0.1% or more that exhibits endocrine-disrupting properties in humans.

Adverse environmental effects

This product does not contain any substance in concentrations of 0.1% or more that exhibits endocrine-disrupting properties toward non-target organisms.
This product does not contain any substance classified as a PBT or vPvB in concentrations of 0.1% or more.
This product does not contain any substance classified as a PMT or vPvM in concentrations of 0.1% or more.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics ; REACH No. : 01-2119471843-32-XXXX ; EC No. : 927-241-2

Weight fraction :	≥ 50 - < 75 %
Classification 1272/2008 [CLP] :	Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT SE 3 ; H336 Aquatic Chronic 3 ; H412 EUH066

Hydrocarbons, C8-C9, isoalkanes ; REACH No. : 01-2119548395-31-XXXX ; EC No. : 932-020-9; CAS No. : 246538-71-6

Weight fraction :	≥ 10 - < 20 %

Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 Asp. Tox. 1 ; H304 STOT SE 3 ; H336 Aquatic Chronic 2 ; H411 EUH066

Distillates (petroleum), hydrotreated light paraffinic ; REACH No. : 01-2119487077-29-XXXX ; EC No. : 265-158-7; CAS No. : 64742-55-8

Weight fraction : ≥ 5 - < 10 %
Classification 1272/2008 [CLP] : Asp. Tox. 1 ; H304

Sulfonic acids, petroleum, calcium salts, TBN < 300 ; REACH No. : 01-2119488992-18-XXXX ; EC No. : 263-093-9; CAS No. : 61789-86-4

Weight fraction : ≥ 1 - < 2 %
Classification 1272/2008 [CLP] : Skin Sens. 1 ; H317
Specific Conc. Limits : Skin Sens. 1 ; H317: C ≥ 10 %

Additional information
For full text of Hazard- and EU Hazard-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

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

Following inhalation
In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. In case of respiratory tract irritation, consult a physician.

In case of skin contact
Remove contaminated, saturated clothing immediately. After contact with skin, wash immediately with plenty of water and soap. Do not wash with: Solvents/Thinner

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. P338 - Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately (poison centre).

Following ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. 62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed
May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. May produce an allergic reaction.

4.3 Indication of any immediate medical attention and special treatment needed
None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media
alcohol resistant foam ; Carbon dioxide (CO2) ; Extinguishing powder ; Water spray jet

Unsuitable extinguishing media
Full water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
Burning produces heavy smoke. In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2) carbon black. Substance, organic.

5.3 Advice for firefighters

Special protective equipment for firefighters

Do not inhale explosion and combustion gases. In case of fire: Wear self-contained breathing apparatus.

5.4 Additional information

Fire transmission possible. Move undamaged containers from immediate hazard area if it can be done safely. 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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

P281 - Use personal protective equipment as required. Personal protection equipment: see section 8 Provide adequate ventilation. 23 - Do not breathe vapour. Special danger of slipping by leaking/spilling product. Clear spills immediately.

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. P273 - Avoid release to the environment. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Disposal: see section 13

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

Avoid: generation/formation of aerosols If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means. Wear personal protection equipment (refer to section 8). Keep away from sources of ignition - No smoking.

Protective measures

Measures to prevent fire

Vapours are heavier than air, spread along floors and form explosive mixtures with air. Vapours can form explosive mixtures with air. Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.

7.2 Conditions for safe storage, including any incompatibilities

Packaging materials

Only use containers specifically approved for the substance/product.

Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed in a cool, well-ventilated place. The floor should be leak tight, jointless and not absorbent.
Suitable container/equipment material: Stainless steel ; Polyethylene (PE)

Hints on joint storage

Storage class (TRGS 510) : 3

Do not store together with

Food and feedingstuffs ; Oxidizing agent

Further information on storage conditions

Storage temperature : 2°C - 20°C

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

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics
- Limit value type (country of origin) : TRGS 900 (D)
  - Limit value : 300 mg/m³
  - Peak limitation : 2(II)
  - Remark : AGS
  - Version : 01.09.2017

Hydrocarbons, C8-C9, isoalkanes ; CAS No. : 246538-71-6
- Limit value type (country of origin) : TRGS 900 (D)
  - Limit value : 300 mg/m³
  - Peak limitation : 2(II)
  - Remark : AGS
  - Version : 01.09.2017

Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4
- Limit value type (country of origin) : TRGS 900 (D)
  - Parameter : A: respirable fraction
  - Limit value : 5 mg/m³
  - Peak limitation : 4(II)
  - Remark : DFG
  - Version : 01.09.2015

DNEL-/PNEC-values

DNEL/DMEL

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics
- Limit value type : DNEL Consumer (systemic)
  - Exposure route : Inhalation
  - Exposure frequency : Long-term
  - Limit value : 185 mg/m³
- Limit value type : DNEL Consumer (systemic)
  - Exposure route : Dermal
  - Exposure frequency : Long-term
  - Limit value : 46 mg/kg bw/day
- Limit value type : DNEL Consumer (systemic)
  - Exposure route : Oral
  - Exposure frequency : Long-term
  - Limit value : 46 mg/kg bw/day
- Limit value type : DNEL worker (systemic)
  - Exposure route : Inhalation
  - Exposure frequency : Long-term
  - Limit value : 871 mg/m³
- Limit value type : DNEL worker (systemic)
  - Exposure route : Dermal
  - Exposure frequency : Long-term
  - Limit value : 77 mg/kg bw/day

Hydrocarbons, C8-C9, isoalkanes ; CAS No. : 246538-71-6
- Limit value type : DNEL Consumer (systemic)
  - Exposure route : Inhalation
  - Exposure frequency : Long-term
  - Limit value : 608 mg/m³
- Limit value type : DNEL Consumer (systemic)
  - Exposure route : Dermal

Exposure frequency :	Long-term
Limit value :	699 mg/kg bw/day
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	699 mg/kg bw/day
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	2035 mg/m³
Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	773 mg/kg bw/day

Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8

Limit value type :	DNEL Consumer (local)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	1,19 mg/m³
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	0,74 mg/kg bw/day
Limit value type :	DNEL worker (local)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	5,58 mg/m³
Limit value type :	DNEL worker (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	2,73 mg/m³
Limit value type :	DNEL worker (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	0,97 mg/kg bw/day

Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4

Limit value type :	DNEL Consumer (local)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	0,513 mg/cm²
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Inhalation
Exposure frequency :	Long-term
Limit value :	2,9 mg/m³
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	1,667 mg/kg bw/day
Limit value type :	DNEL Consumer (systemic)
Exposure route :	Oral
Exposure frequency :	Long-term
Limit value :	0,8333 mg/kg bw/day
Limit value type :	DNEL worker (local)
Exposure route :	Dermal
Exposure frequency :	Long-term
Limit value :	1,03 mg/cm²

Limit value type : DNEL worker (systemic)
Exposure route : Inhalation
Exposure frequency : Long-term
Limit value : 11,75 mg/m³
Limit value type : DNEL worker (systemic)
Exposure route : Dermal
Exposure frequency : Long-term
Limit value : 3,33 mg/kg bw/day

PNEC

Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8
Limit value type : PNEC (Secondary poisoning)
Limit value : 9,33 mg/kg food

Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4
Limit value type : PNEC (Aquatic, freshwater)
Limit value : 1 mg/l
Limit value type : PNEC (Aquatic, intermittent release)
Limit value : 10 mg/l
Limit value type : PNEC (Aquatic, marine water)
Limit value : 1 mg/l
Limit value type : PNEC (Secondary poisoning)
Limit value : 16,6 mg/kg food
Limit value type : PNEC (Sewage treatment plant)
Limit value : 1000 mg/l

8.2 Exposure controls

Operate if possible out of doors or in a well-ventilated place. Fresh air (open windows and doors) is necessary. If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Personal protection equipment

Eye/face protection



Wear suitable safety goggles in case of splash.

Suitable eye protection

EN 166.

Skin protection

Hand protection



Wear protective gloves in case of longer lasting skin contact.

Suitable gloves type : EN 374.

Suitable material : NBR (Nitrile rubber)

Breakthrough time : 480 min.

Thickness of the glove material : 0.4 mm

Remark : The exact break trough time has to be requested from the protective glove manufacturer and limits has to be ensured.

Respiratory protection



Respiratory protection necessary at: exceeding exposure limit values

Suitable respiratory protection apparatus

Combination filtering device
Type : A

Remark

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (DGUV 112-190).

General information

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

Environmental exposure controls

Do not allow to enter into surface water or drains. Safe handling: see section 7

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. The minimum requirements for safety and health protection when employees use personal protective equipment at work (89/656/EEC) must be observed.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid

Colour : beige

Odour

Hydrocarbons, aliphatic.

Safety characteristics

Melting point/freezing point :	(1013 hPa)		not determined		
Initial boiling point and boiling range :	(1013 hPa)	>=	136	°C	
Flash point :		>	26	°C	DIN EN ISO 13736
Auto-ignition temperature :		>	200	°C	
Flammability :			flammable		
Lower explosion limit :			0,7	Vol-%	
Upper explosion limit :			7	Vol-%	
Vapur pressure :	(20 °C)		8	hPa	
Density :	(20 °C)	approx.	0,79	g/cm³	
Water solubility :	(20 °C)		practically insoluble		
pH :	(20 °C)		not applicable		
Cinematic viscosity :	(40 °C)	approx.	8	mm²/s	
Solvent content :			80	Weight-%	
Relative vapour density :	(20 °C)		not determined		
Maximum VOC content (2010/75/EC) :			79,7	Weight-%	
Maximum VOC content (Switzerland VOCV; SR 814.018) :			79,9	Weight-%	
Taxable VOC content (Switzerland VOCV; SR 814.018 Annex 1) :			79,9	Weight-%	
VOC-value :			629,5	g/l	

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

No information available.

10.2 Chemical stability

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

10.3 Possibility of hazardous reactions

Exothermic reaction with: Strong acid ; Strong alkali ; Oxidising agent, strong.
In use, may form flammable/explosive vapour-air mixture.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Acute oral toxicity

Parameter :	ATEmix
Exposure route :	Oral
Effective dose :	> 5000 mg/kg
Parameter :	LD50 (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 5000 mg/kg
Method :	OECD 401
Parameter :	LD50 (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Exposure route :	Oral
Species :	Rat
Effective dose :	> 16000 mg/kg
Method :	OECD 401

Acute dermal toxicity

Parameter :	ATEmix
Exposure route :	Dermal
Effective dose :	> 3000 mg/kg
Parameter :	LD50 (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 5000 mg/kg
Method :	OECD 402
Parameter :	LD50 (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	> 4000 mg/kg

Acute inhalation toxicity

Parameter :	ATEmix
Exposure route :	Inhalation (vapour)
Effective dose :	> 20 mg/l
Parameter :	LC50 (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Exposure route :	Inhalation
Species :	Rat
Effective dose :	> 4951 mg/l
Exposure time :	4 h

Method : OECD 403

Corrosion

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Skin sensitisation

Parameter :	Skin sensitisation (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Species :	Guinea pig
Result :	Other skin sensitiser (Subcategory 1B).
Method :	OECD 406

Assessment/classification

Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract

Based on available data, the classification criteria are not met.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No further relevant information available.

Germ cell mutagenicity

No further relevant information available.

Reproductive toxicity

No further relevant information available.

STOT-single exposure

May cause drowsiness or dizziness.

STOT-repeated exposure

No further relevant information available.

Aspiration hazard

May be fatal if swallowed and enters airways.

11.2 Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Toxicokinetics, metabolism and distribution

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

Other adverse effects

None

Additional information

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

SECTION 12: Ecological information

Assessment/classification There are no data available on the preparation/mixture itself. Do not allow to enter into surface water or drains.

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter :	LL50 (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Species :	Oncorhynchus mykiss (Rainbow trout)

Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	10 - 30 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (Hydrocarbons, C8-C9, isoalkanes ; CAS No. : 246538-71-6)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	0,11 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LL50 (Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8)
Species :	Pimephales promelas (fathead minnow)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 100 mg/l
Exposure time :	96 h
Method :	OECD 203
Parameter :	LC50 (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	> 10000 mg/l
Exposure time :	96 h

Chronic (long-term) fish toxicity

Parameter :	NOELR (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Species :	Oncorhynchus mykiss (Rainbow trout)
Evaluation parameter :	Chronic (long-term) fish toxicity
Effective dose :	0,182 mg/l
Exposure time :	28 D

Acute (short-term) toxicity to crustacea

Parameter :	EL50 (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	22 - 46 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EL50 (Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) toxicity to crustacea
Effective dose :	> 10000 mg/l
Exposure time :	48 h
Method :	OECD 202
Parameter :	EC50 (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Acute (short-term) daphnia toxicity
Effective dose :	> 1000 mg/l
Exposure time :	48 h

Chronic (long-term) toxicity to aquatic invertebrate

Parameter :	NOELR (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Species :	Daphnia magna (Big water flea)
Evaluation parameter :	Chronic (long-term) daphnia toxicity
Effective dose :	0,317 mg/l
Exposure time :	21 D

Acute (short-term) toxicity to algae and cyanobacteria

Parameter :	EC50 (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Species :	Scenedesmus subspicatus
Evaluation parameter :	Inhibition of biomass development
Effective dose :	> 100 mg/l
Exposure time :	72 h

Chronic (long-term) toxicity to aquatic algae and cyanobacteria

Parameter :	NOELR (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Species :	Pseudokirchneriella subcapitata
Evaluation parameter :	Inhibition of growth rate
Effective dose :	< 1 mg/l
Exposure time :	72 h
Method :	OECD 201

Toxicity to microorganisms

Parameter :	EL50 (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Species :	Bacteria toxicity
Effective dose :	1,065 mg/l
Exposure time :	48 h
Parameter :	EC50 (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Species :	Bacteria toxicity
Effective dose :	> 10000 mg/l
Method :	OECD 209

12.2 Persistence and degradability

Biodegradation

Parameter :	BOD (% of ThOD) (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Inoculum :	Degree of elimination
Evaluation parameter :	Aerobic
Degradation rate :	89 %
Test duration :	28 D
Evaluation :	Readily biodegradable (according to OECD criteria).
Method :	OECD 301F
Parameter :	BOD (% of ThOD) (Hydrocarbons, C8-C9, isoalkanes ; CAS No. : 246538-71-6)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	51,3 %
Test duration :	28 D
Evaluation :	Not readily biodegradable (according to OECD criteria)
Method :	OECD 301F
Parameter :	BOD (% of ThOD) (Hydrocarbons, C8-C9, isoalkanes ; CAS No. : 246538-71-6)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	64 %
Test duration :	75 D
Evaluation :	Not readily biodegradable (according to OECD criteria) Moderately/partially biodegradable.
Method :	OECD 301F
Parameter :	BOD (% of ThOD) (Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	31 %
Test duration :	28 D
Evaluation :	Not readily biodegradable (according to OECD criteria)
Method :	OECD 301F
Parameter :	BOD (% of COD) (Sulfonic acids, petroleum, calcium salts, TBN < 300 ; CAS No. : 61789-86-4)
Inoculum :	Biodegradation
Evaluation parameter :	Aerobic
Degradation rate :	8 %
Test duration :	28 D
Evaluation :	Not readily biodegradable (according to OECD criteria)

Method : OECD 301D

12.3 Bioaccumulative potential

Parameter : Partition coefficient n-octanol/water (log value) (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics)
Value : 1,99 - 5,25
Parameter : Partition coefficient n-octanol/water (log value) (Distillates (petroleum), hydrotreated light paraffinic ; CAS No. : 64742-55-8)
Value : > 3,5

12.4 Mobility in soil

No information available.

12.5 Results of PBT and vPvB assessment

This product does not contain any substance classified as a PBT or vPvB in concentrations of 0.1% or more.

12.6 Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Directive 2008/98/EC (Waste Framework Directive)

Before intended use

Waste codes/waste designations according to EWC/AVV

14 06 03* (Other solvents and solvent mixtures)

Other disposal recommendations

Dispose of waste according to applicable legislation. Dispose of contents/container to an appropriate recycling or disposal facility. Contaminated packages must be completely emptied and can be re-used following proper cleaning. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number or ID number

UN 3295

14.2 UN proper shipping name

Land transport (ADR/RID)
HYDROCARBONS, LIQUID, N.O.S.

Sea transport (IMDG)
HYDROCARBONS, LIQUID, N.O.S.

Air transport (ICAO-TI / IATA-DGR)
HYDROCARBONS, LIQUID, N.O.S.

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) :	3
Classification code :	F1
Hazard identification number (Kemler No.) :	30
Tunnel restriction code :	D/E
Special Provisions :	LQ 5 l · E 1

Hazard label(s) :



3

Sea transport (IMDG)

Class(es) :	3
EmS-No. :	F-E / S-D
Special Provisions :	LQ 5 l · E 1

Hazard label(s) :



3

Air transport (ICAO-TI / IATA-DGR)

Class(es) :	3
Special Provisions :	E 1

Hazard label(s) :



3

14.4 Packing group

III

14.5 Environmental hazards

Land transport (ADR/RID) : No
Sea transport (IMDG) : No
Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

None

14.7 Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

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

EU legislation

Authorisations and/or restrictions on use

Restrictions on use

Use restriction according to REACH annex XVII, no. : 3

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

National regulations

Water hazard class

Classification according to AwSV - Class : 2 (Obviously hazardous to water)

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this preparation were not carried out.

SECTION 16: Other information

16.1 Indication of changes

07. Conditions for safe storage, including any incompatibilities · 08. Occupational exposure limit values

16.2 Abbreviations and acronyms

ADR: Agreement concerning the International Carriage of Dangerous Goods by Road AOX: Adsorbed Organically Bound Halogens
AwSV: German Regulations on Facilities for the Handling of Substances Hazardous to Water
CAS: Chemical Abstracts Service (Department of American Chemical Society)
CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL: Derived No Effect Level
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances
EWC/AVV: European Waste Classification Catalog / Waste List Regulation (german integration) GHS: Globally Harmonized System of Classifiaction and Labelling of Chemicals
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Code for Dangerous Goods
IMO: International Maritime Organization
Index No.: Identification number in Annex VI of the CLP
PBT: persistent, bioaccumulative and toxic according to REACH
PMT: persistent, mobile and toxic according to REACH
PNEC:Predicted No Effect Concentration
REACH: Regulation (EC) No. 1907/2006
RID: Regulations for the International Transport of Dangerous Goods by Rail (Règlement concernant le transport international ferroviaire de marchandises dangereuses)
STEL: (Short-Term Exposure Limit)
TLV: Threshold Limit Value
TRGS: German Technical Rules for Hazardous Substances ("Technische Regel für den Umgang mit Gefahrstoffen")
TWA: Time-Weighted Average
UFI: Unique Formula Identifier
VOC: volatile organic compound
vPvB: very persistent and very bioaccumulative according to REACH
vPvM: very persistent and very mobile according to REACH
WGK: German Water Hazard Class ("Wassergefährdungsklasse")

16.3 Key literature references and sources for data

AwSV: German Regulations on Facilities for the Handling of Substances Hazardous to Water
DGUV: GESTIS-Stoffdatenbank
Directive 2004/42/EC (on the limitation of emissions of volatile organic compounds resulting from the use of organic solvents in certain paints and varnishes and in vehicle refinishing products)
Directive 2010/75/EU (on emissions from industrial and livestock farming activities)
Directive 92/85/EEC (on maternity protection)
Directive 94/33/EC (on the protection of young people at work)
EC_Safety Data Sheet of Suppliers
ECHA: Classification And Labelling Inventory
ECHA: Registered Substances
GDL: Gefahrstoffdatenbank der Länder
Industrial Safety Regulation – BetrSichV
Major Accidents Ordinance – 12th BImSchV
Regulation (EC) No 1223/2009 (on cosmetic products – Annex III)
Regulation (EC) No 2019/1021 (on persistent organic pollutants)
Regulation (EC) No 2019/1148 (on the marketing and use of explosives precursors)
Regulation (EC) No 528/2012 (on the making available on the market and use of biocidal products)
Regulation (EC) No 648/2004 (on detergents)
Regulation (EC) No 649/2012 (on the export and import of dangerous chemicals)
Regulation (EC) No. 1272/2008 of the European Parliament and of the Council Regulation (EC) No. 1907/2006
|-> REGULATION (EU) 2020/878 of 18 June 2020
Technical Instructions on Air Quality Control – TA Luft
UBA Rigoletto: Wassergefährdende Stoffe

16.4 Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].
Evaluation :
Flam. Liq. 3 : Flash point (°C) EN ISO 13736
STOT SE 3 : Calculation method.
Asp. Tox. 1 : Calculation method.
Aquatic Chronic 3 : Calculation method.

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

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

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.