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Revision date / version: 07.03.2017 / 0007  
Replacing version dated / version: 03.07.2015 / 0006  
Valid from: 07.03.2017  
PDF print date: 06.04.2017  
METAL + BRAKE CLEANER 500 ML  
Art.: 9030881

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**Safety data sheet**  
**according to Regulation (EC) No 1907/2006, Annex II**

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

**1.1 Product identifier**

**METAL + BRAKE CLEANER 500 ML**  
**Art.: 9030881**

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

Brake cleaner  
Sector of use [SU]:  
SU 0 - Other  
SU 1 - Agriculture, forestry, fishery  
SU19 - Building and construction work  
SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)  
Chemical product category [PC]:  
PC35 - Washing and cleaning products  
Process category [PROC]:  
PROC11 - Non industrial spraying  
**Uses advised against:**  
No information available at present.

**1.3 Details of the supplier of the safety data sheet**



BTI Befestigungstechnik GmbH & Co. KG, Salzstr. 51, 74653 Ingelfingen, Germany  
Phone: +49 7940 141 256, Fax: +49 7940 141 9256  
Stefan.Haug@bti.de, www.bti.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

**1.4 Emergency telephone number**

**Emergency information services / official advisory body:**

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**Telephone number of the company in case of emergencies:**

+49 (0) 700 / 24 112 112 (BRC)

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**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation (EC) 1272/2008 (CLP)**

<b>Hazard class</b>	<b>Hazard category</b>	<b>Hazard statement</b>
Skin Irrit.	2	H315-Causes skin irritation.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aquatic Chronic	2	H411-Toxic to aquatic life with long lasting effects.

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Aerosol	1	H222-Extremely flammable aerosol.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
Aerosol	1	H229-Pressurised container: May burst if heated.

## 2.2 Label elements

### Labeling according to Regulation (EC) 1272/2008 (CLP)



Danger

H315-Causes skin irritation. H336-May cause drowsiness or dizziness. H411-Toxic to aquatic life with long lasting effects. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P210-Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P211-Do not spray on an open flame or other ignition source. P251-Do not pierce or burn, even after use. P261-Avoid breathing vapours or spray. P273-Avoid release to the environment. P280-Wear protective gloves. P312-Call a POISON CENTRE / doctor if you feel unwell. P405-Store locked up. P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C. P501-Dispose of contents / container safely.

Without adequate ventilation, formation of explosive mixtures may be possible.  
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane

## 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

## SECTION 3: Composition/information on ingredients

Aerosol

### 3.1 Substance

n.a.

### 3.2 Mixture

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	
Registration number (REACH)	01-2119475514-35-XXXX
Index	---
EINECS, ELINCS, NLP	921-024-6 (REACH-IT List-No.)

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<b>CAS</b>	---
<b>content %</b>	80-100
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Skin Irrit. 2, H315 STOT SE 3, H336 Aquatic Chronic 2, H411

<b>Carbon dioxide</b>	<b>Substance for which an EU exposure limit value applies.</b>
<b>Registration number (REACH)</b>	---
<b>Index</b>	---
<b>EINECS, ELINCS, NLP</b>	204-696-9
<b>CAS</b>	124-38-9
<b>content %</b>	1-5
<b>Classification according to Regulation (EC) 1272/2008 (CLP)</b>	---

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.  
 The substances named in this section are given with their actual, appropriate classification!  
 For substances that are listed in appendix VI, table 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### Inhalation

Remove person from danger area.  
 Supply person with fresh air and consult doctor according to symptoms.  
 If the person is unconscious, place in a stable side position and consult a doctor.

#### Skin contact

Remove contaminated clothing immediately.  
 Wash thoroughly with soap and water.  
 Protective hand cream recommended.

#### Eye contact

Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

#### Ingestion

Typically no exposure pathway.  
 Consult doctor immediately - keep Data Sheet available.  
 Do not induce vomiting.

### 4.2 Most important symptoms and effects, both acute and delayed

If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.

The following may occur:

Headaches  
 Dizziness  
 Nausea  
 Coordination disorders  
 Effects/damages the central nervous system  
 Unconsciousness

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with long-term contact:

Drying of the skin.

Dermatitis (skin inflammation)

Ingestion:

Nausea

Vomiting

Danger of aspiration

Lung damage

In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

n.c.

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### **SECTION 5: Firefighting measures**

#### **5.1 Extinguishing media**

##### **Suitable extinguishing media**

CO<sub>2</sub>

Foam

Dry extinguisher

##### **Unsuitable extinguishing media**

High volume water jet

#### **5.2 Special hazards arising from the substance or mixture**

In case of fire the following can develop:

Oxides of carbon

Toxic pyrolysis products.

Danger of explosion by prolonged heating.

Explosive vapour/air mixture

#### **5.3 Advice for firefighters**

Protective respirator with independent air supply.

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

In case of fire and/or explosion do not breathe fumes.

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### **SECTION 6: Accidental release measures**

#### **6.1 Personal precautions, protective equipment and emergency procedures**

Remove possible causes of ignition - do not smoke.

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

#### **6.2 Environmental precautions**

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

Prevent surface and ground-water infiltration, as well as ground penetration.

Prevent from entering drainage system.

If accidental entry into drainage system occurs, inform responsible authorities.

#### **6.3 Methods and material for containment and cleaning up**

If spray or gas escapes, ensure ample fresh air is available.

Active substance:



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Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.

**6.4 Reference to other sections**

For personal protective equipment see Section 8 and for disposal instructions see Section 13.

**SECTION 7: Handling and storage**

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

**7.1 Precautions for safe handling**

**7.1.1 General recommendations**

- Ensure good ventilation.
- Keep away from sources of ignition - Do not smoke.
- Take precautions against electrostatic charges.
- Do not use on hot surfaces.
- Avoid contact with eyes or skin.
- Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
- Observe directions on label and instructions for use.
- Use working methods according to operating instructions.

**7.1.2 Notes on general hygiene measures at the workplace**

- General hygiene measures for the handling of chemicals are applicable.
- Wash hands before breaks and at end of work.
- Keep away from food, drink and animal feedingstuffs.
- Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

**7.2 Conditions for safe storage, including any incompatibilities**

- Keep out of access to unauthorised individuals.
- Store product closed and only in original packing.
- Not to be stored in gangways or stair wells.
- Observe special regulations for aerosols!
- Store in a well ventilated place.
- Keep protected from direct sunlight and temperatures over 50°C.
- Do not carry along in automobile interior.
- Observe special storage conditions.

**7.3 Specific end use(s)**

No information available at present.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):  
 800 mg/m<sup>3</sup>

Chemical Name	Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane	Content %:80-100
WEL-TWA: 800 mg/m <sup>3</sup>	WEL-STEL: ---	---
Monitoring procedures:	<ul style="list-style-type: none"> <li>- Draeger - Hydrocarbons 2/a (81 03 581)</li> <li>- Draeger - Hydrocarbons 0,1%/c (81 03 571)</li> <li>- Compur - KITA-187 S (551 174)</li> </ul>	

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BMGV: ---		Other information: ---	
<b>Chemical Name</b>		Carbon dioxide	Content %: 1-5
WEL-TWA: 5000 ppm (9150 mg/m <sup>3</sup> ) (WEL), 5000 ppm (9000 mg/m <sup>3</sup> ) (EU)		WEL-STEL: 15000 ppm (27400 mg/m <sup>3</sup> ) (WEL)	---
Monitoring procedures:			
<ul style="list-style-type: none"> <li>- Compur - KITA-126 B (549 475)</li> <li>- Compur - KITA-126 SA (549 467)</li> <li>- Compur - KITA-126 SB (548 816)</li> <li>- Compur - KITA-126 SF (549 491)</li> <li>- Compur - KITA-126 SG (550 210)</li> <li>- Compur - KITA-126 SH (549 509)</li> <li>- Compur - KITA-126 UH (549 517)</li> <li>- Draeger - Carbon Dioxide 100/a (81 01 811)</li> <li>- Draeger - Carbon Dioxide 0,1%/a (CH 23 501)</li> <li>- Draeger - Carbon Dioxide 0,5%/a (CH 31 401)</li> <li>- Draeger - Carbon Dioxide 1%/a (CH 25 101)</li> <li>- Draeger - Carbon Dioxide 5%/A (CH 20 301)</li> <li>- OSHA ID-172 (Carbon dioxide in workplace atmospheres) - 1990</li> <li>- NIOSH 6603 (Carbon dioxide) - 1994</li> </ul>			
BMGV: ---		Other information: ---	
<b>Chemical Name</b>		Propane	Content %:
WEL-TWA: 1000 ppm (ACGIH)		WEL-STEL: ---	---
Monitoring procedures: - Compur - KITA-125 SA (549 954)			
BMGV: ---		Other information: ---	
<b>Chemical Name</b>		Isobutane	Content %:
WEL-TWA: 1000 ppm (ACGIH)		WEL-STEL: ---	---
Monitoring procedures: - Compur - KITA-113 SB(C) (549 368)			
BMGV: ---		Other information: ---	

Ⓒ WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.  
 \*\* = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - dermal	Long term, systemic effects	DNEL	149	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	608	mg/m <sup>3</sup>	
Consumer	Human - oral	Long term, systemic effects	DNEL	699	mg/kg bw/day	



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Workers / employees	Human - dermal	Long term, systemic effects	DNEL	773	mg/kg bw/day	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2035	mg/m <sup>3</sup>	

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.

If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.

Applies only if maximum permissible exposure values are listed here.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.

These are specified by e.g. EN 14042.

EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:

Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

0,35

Permeation time (penetration time) in minutes:

>= 240

Safety gloves made of fluorocarbon rubber (EN 374).

Minimum layer thickness in mm:

0,4

Permeation time (penetration time) in minutes:

>= 240

Protective hand cream recommended.

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions.

The recommended maximum wearing time is 50% of breakthrough time.

Skin protection - Other:

Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:

Normally not necessary.

If OES or MEL is exceeded.



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Gas mask filter A (EN 14387), code colour brown

Thermal hazards:

If applicable, these are included in the individual protective measures (eye/face protection, skin protection, respiratory protection).

Additional information on hand protection - No tests have been performed.

In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.

Selection of materials derived from glove manufacturer's indications.

Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.

Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.

In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.

The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls

No information available at present.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state:	Aerosol. Active substance: liquid.
Colour:	Colourless
Odour:	Characteristic
Odour threshold:	Not determined
pH-value:	Not determined
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	n.a.
Flash point:	n.a.
Evaporation rate:	Not determined
Flammability (solid, gas):	Yes
Lower explosive limit:	0,6 Vol-%
Upper explosive limit:	7,2 Vol-%
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	0,71 g/ml
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	>250 °C (Ignition temperature )
Decomposition temperature:	Not determined
Viscosity:	Not determined
Explosive properties:	When using: development of explosive vapour/air mixture possible. Product is not explosive.
Oxidising properties:	Not determined





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## 9.2 Other information

Miscibility:	Not determined
Fat solubility / solvent:	Not determined
Conductivity:	Not determined
Surface tension:	Not determined
Solvents content:	Not determined

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See also Subsection 10.2 to 10.6.  
 The product has not been tested.

### 10.2 Chemical stability

See also Subsection 10.1 to 10.6.  
 Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions

See also Subsection 10.1 to 10.6.  
 No decomposition if used as intended.

### 10.4 Conditions to avoid

See also section 7.  
 Heating, open flame, ignition sources  
 Pressure increase will result in danger of bursting.  
 Electrostatic charge

### 10.5 Incompatible materials

See also section 7.  
 Avoid contact with strong oxidizing agents.

### 10.6 Hazardous decomposition products

See also Subsection 10.1 to 10.5.  
 See also section 5.2  
 No decomposition when used as directed.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

Possibly more information on health effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:						n.d.a.
Acute toxicity, by dermal route:						n.d.a.
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.



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Respiratory or skin sensitisation:						n.d.a.
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity - single exposure (STOT-SE):						n.d.a.
Specific target organ toxicity - repeated exposure (STOT-RE):						n.d.a.
Aspiration hazard:						Yes
Symptoms:						n.d.a.
Other information:						Classification according to calculation procedure.

<b>Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, &lt; 5% n-hexane</b>						
<b>Toxicity / effect</b>	<b>Endpoint</b>	<b>Value</b>	<b>Unit</b>	<b>Organism</b>	<b>Test method</b>	<b>Notes</b>
Acute toxicity, by oral route:	LD50	>5840	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>2920	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by inhalation:	LC50	>25,2	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	Vapours
Skin corrosion/irritation:					OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant
Serious eye damage/irritation:					OECD 405 (Acute Eye Irritation/Corrosion)	Mild irritant (Analogous conclusion)
Respiratory or skin sensitisation:					OECD 406 (Skin Sensitisation)	Analogous conclusion, No (inhalation and skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Analogous conclusion, Negative
Carcinogenicity:						Negative
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Analogous conclusion, Negative

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Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure (STOT-RE):						Negative
Aspiration hazard:						Yes
Symptoms:						drowsiness, unconsciousness, heart/circulatory disorders, headaches, cramps, drowsiness, mucous membrane irritation, dizziness, nausea and vomiting.
Specific target organ toxicity - single exposure (STOT-SE), inhalative:						Not irritant (respiratory tract).

Carbon dioxide						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Symptoms:						unconsciousness, blisters by skin-contact, vomiting, frostbite, annoyance, palpitations, itching, headaches, cramps, ear noises, dizziness

Propane						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		

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Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Reproductive toxicity (Developmental toxicity):	NOAEC	21,641	mg/l		OECD 422 (Combined Repeated Dose Tox. Study with the Reproduction/Development. Tox. Screening Test)	
Symptoms:						breathing difficulties, unconsciousness, frostbite, headaches, cramps, mucous membrane irritation, dizziness, nausea and vomiting.

<b>Isobutane</b>						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	658	mg/l/4h	Rat		
Serious eye damage/irritation:				Rabbit		Not irritant
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative
Symptoms:						unconsciousness, frostbite, headaches, cramps, dizziness, nausea and vomiting.

## SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

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Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							Product floats on the water surface. Isolate as much as possible with an oil separator.
12.3. Bioaccumulative potential:							n.d.a.
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT and vPvB assessment							n.d.a.
12.6. Other adverse effects:							n.d.a.
Other information:							According to the recipe, contains no AOX.

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	11,4	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	28d	2,045	mg/l	Oncorhynchus mykiss		
12.1. Toxicity to fish:	LL50	96h	11,4	mg/l	Salmo gairdneri	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	2,04	mg/l	Salmo gairdneri		
12.1. Toxicity to daphnia:	EC50	48h	3	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	



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12.1. Toxicity to daphnia:	NOEC/NOEL	21d	1	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to daphnia:	NOELR	48h	2,1	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	30	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	81	%			Analogous conclusion
12.3. Bioaccumulative potential:	BCF		242-253				
12.4. Mobility in soil:							Adsorption in ground., Product is slightly volatile.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Other information:	AOX		0	%			

#### Carbon dioxide

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	35	mg/l	Salmo gairdneri		
12.6. Other adverse effects:							Greenhouse effect
Other information:	Log Kow		0,83				
Global warming potential (GWP):			1				

#### Propane

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:	Log Pow		2,28				A notable biological accumulation potential is not to be expected (LogPow 1-3).



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12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### For the substance / mixture / residual amounts

EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)

14 06 03 other solvents and solvent mixtures

16 05 04 gases in pressure containers (including halons) containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

#### For contaminated packing material

Pay attention to local and national official regulations.

Do not perforate, cut up or weld uncleaned container.

15 01 04 metallic packaging

## SECTION 14: Transport information

### General statements

14.1. UN number: 1950

#### Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

UN 1950 AEROSOLS

14.3. Transport hazard class(es): 2.1

14.4. Packing group: -

Classification code: 5F

LQ: 1 L

14.5. Environmental hazards: environmentally hazardous

Tunnel restriction code: D

#### Transport by sea (IMDG-code)

14.2. UN proper shipping name:

AEROSOLS (NAPHTHA (PETROLEUM))

14.3. Transport hazard class(es): 2.1

14.4. Packing group: -

EmS: F-D, S-U

Marine Pollutant: Yes

14.5. Environmental hazards: environmentally hazardous

#### Transport by air (IATA)





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14.2. UN proper shipping name:  
 Aerosols, flammable  
 14.3. Transport hazard class(es): 2.1  
 14.4. Packing group: -  
 14.5. Environmental hazards: Not applicable



**14.6. Special precautions for user**

Persons employed in transporting dangerous goods must be trained.  
 All persons involved in transporting must observe safety regulations.  
 Precautions must be taken to prevent damage.

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Freighted as packaged goods rather than in bulk, therefore not applicable.  
 Minimum amount regulations have not been taken into account.  
 Danger code and packing code on request.  
 Comply with special provisions.

**SECTION 15: Regulatory information**

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

Observe restrictions:  
 Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): 96,6 %

**REGULATION (EC) No 648/2004**

30 % and more  
 aliphatic hydrocarbons

Observe youth employment law (German regulation).

**15.2 Chemical safety assessment**

A chemical safety assessment is not provided for mixtures.

**SECTION 16: Other information**

Revised sections: 2,16  
 These details refer to the product as it is delivered.  
 Employee instruction/training in handling hazardous materials is required.  
 Employee training in handling dangerous goods is required.

**Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):**

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Irrit. 2, H315	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aquatic Chronic 2, H411	Classification according to calculation procedure.
Aerosol 1, H222	Classification based on test data.
Asp. Tox. 1, H304	Classification according to calculation procedure.





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Aerosol 1, H229	Classification based on test data.
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The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

H225 Highly flammable liquid and vapour.

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H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

Skin Irrit. — Skin irritation

STOT SE — Specific target organ toxicity - single exposure - narcotic effects

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Aerosol — Aerosols

Asp. Tox. — Aspiration hazard

Flam. Liq. — Flammable liquid

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#### Any abbreviations and acronyms used in this document:

AC Article Categories

acc., acc. to according, according to

ACGIH American Conference of Governmental Industrial Hygienists

ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)

AOEL Acceptable Operator Exposure Level

AOX Adsorbable organic halogen compounds

approx. approximately

Art., Art. no. Article number

ATE Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP)

BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

BHT Butylhydroxytoluol (= 2,6-Di-*t*-butyl-4-methyl-phenol)

BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

CEC Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids

CESIO Comité Européen des Agents de Surface et de leurs Intermédiaires Organiques

CIPAC Collaborative International Pesticides Analytical Council

CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)

CMR carcinogenic, mutagenic, reproductive toxic



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COD Chemical oxygen demand  
CTFA Cosmetic, Toiletry, and Fragrance Association  
DMEL Derived Minimum Effect Level  
DNEL Derived No Effect Level  
DOC Dissolved organic carbon  
DT50 Dwell Time - 50% reduction of start concentration  
DVS Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)  
dw dry weight  
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance  
EC European Community  
ECHA European Chemicals Agency  
EEA European Economic Area  
EEC European Economic Community  
EINECS European Inventory of Existing Commercial Chemical Substances  
ELINCS European List of Notified Chemical Substances  
EN European Norms  
EPA United States Environmental Protection Agency (United States of America)  
ERC Environmental Release Categories  
ES Exposure scenario  
etc. et cetera  
EU European Union  
EWC European Waste Catalogue  
Fax. Fax number  
gen. general  
GHS Globally Harmonized System of Classification and Labelling of Chemicals  
GWP Global warming potential  
HET-CAM Hen's Egg Test - Chorionallantoic Membrane  
HGWP Halocarbon Global Warming Potential  
IARC International Agency for Research on Cancer  
IATA International Air Transport Association  
IBC Intermediate Bulk Container  
IBC (Code) International Bulk Chemical (Code)  
IC Inhibitory concentration  
IMDG-code International Maritime Code for Dangerous Goods  
incl. including, inclusive  
IUCLID International Uniform Chemical Information Database  
LC lethal concentration  
LC50 lethal concentration 50 percent kill  
LCLo lowest published lethal concentration  
LD Lethal Dose of a chemical  
LD50 Lethal Dose, 50% kill  
LDLo Lethal Dose Low  
LOAEL Lowest Observed Adverse Effect Level  
LOEC Lowest Observed Effect Concentration  
LOEL Lowest Observed Effect Level  
LQ Limited Quantities  
MARPOL International Convention for the Prevention of Marine Pollution from Ships  
n.a. not applicable  
n.av. not available  
n.c. not checked



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n.d.a. no data available

NIOSH National Institute of Occupational Safety and Health (United States of America)

NOAEC No Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level

NOEC No Observed Effect Concentration

NOEL No Observed Effect Level

ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

PAH polycyclic aromatic hydrocarbon

PBT persistent, bioaccumulative and toxic

PC Chemical product category

PE Polyethylene

PNEC Predicted No Effect Concentration

POCP Photochemical ozone creation potential

ppm parts per million

PROC Process category

PTFE Polytetrafluorethylene

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)

REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.

RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)

SADT Self-Accelerating Decomposition Temperature

SAR Structure Activity Relationship

SU Sector of use

SVHC Substances of Very High Concern

Tel. Telephone

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances)

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VbF Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria))

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period), WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period) (EH40, UK).

WHO World Health Organization

wwt wet weight

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The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge. No responsibility.