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

Revision date / version: 12.06,2018 / 0005

Replacing version dated / version: 30.05.2016 / 0004

Valid from: 12.06.2018 PDF print date: 15.06.2018

3-IN-ONE® Anti-Seize Copper Grease

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

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

#### 1.1 Product identifier

## 3-IN-ONE® Anti-Seize Copper Grease

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

Lubricant

#### **Uses advised against:**

No information available at present.

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

WD-40 Company Limited, PO Box 440, Kiln Farm, Milton Keynes, MK11 3LF, United Kingdom Phone:+44 (0) 1908 555400, Fax:+44 (0) 1908 266900 Compliance@wd40.co.uk, www.wd40.co.uk

P.R. Rielly Limited KarKraft House, Kilbarrack Industrial Estate, Kilbarrack, Dublin 5, Ireland Phone:01-832 0006, Fax:01-832 0016 web@team.ie

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:

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland, Tel.: +353 (0)1 809 2166 (Public Poisons Info Line, 8am-10pm, 7 days a week)

+353 (0)1 809 2566 (Info for Healthcare Professionals ONLY, 24 h, 7 days a week)

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

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

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

1

#### Classification according to Regulation (EC) 1272/2008 (CLP) Hazard class Hazard category Hazard statement

riazara ciass	riazara category	nazara statement
Skin Irrit.	2	H315-Causes skin irritation.
Asp. Tox.	1	H304-May be fatal if swallowed and enters airways.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.
Aerosol	1	H222-Extremely flammable aerosol.

H229-Pressurised container: May burst if heated.

#### 2.2 Label elements

Aerosol

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



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H315-Causes skin irritation. H412-Harmful 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. P273-Avoid release to the environment. P280-Wear protective gloves.

P332+P313-If skin irritation occurs: Get medical advice / attention.

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, isoalkanes, <5% n-hexane

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

#### 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.)
CAS	
content %	10-<20
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225
	Skin Irrit. 2, H315
	Aquatic Chronic 2, H411
	Asp. Tox. 1, H304
	STOT SE 3, H336

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	
Registration number (REACH)	01-2119475515-33-XXXX
Index	
EINECS, ELINCS, NLP	927-510-4 (REACH-IT List-No.)
CAS	
content %	5-10
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225
	Asp. Tox. 1, H304
	Skin Irrit. 2, H315
	STOT SE 3, H336
	Aguatic Chronic 2, H411



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Hydrocarbons, C6, isoalkanes, <5% n-hexane	
Registration number (REACH)	01-2119484651-34-XXXX
Index	
EINECS, ELINCS, NLP	931-254-9 (REACH-IT List-No.)
CAS	(64742-49-0)
content %	5-10
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 2, H225
	Asp. Tox. 1, H304
	Skin Irrit. 2, H315
	STOT SE 3, H336
	Aquatic Chronic 2, H411

Copper	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	231-159-6
CAS	7440-50-8
content %	0,5-5
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302
	Aquatic Acute 1, H400 (M=1)
	Aquatic Chronic 2, H411

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 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

First-aiders should ensure they are protected!

Never pour anything into the mouth of an unconscious person!

#### 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 polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

## **Eye contact**

Remove contact lenses.

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

#### Ingestion

Typically no exposure pathway.

Rinse the mouth thoroughly with water.

Do not induce vomiting - give copious water to drink. Consult doctor immediately.

Danger of aspiration

In case of vomiting, keep head low so that the stomach content does not reach the lungs.

#### 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:

Irritation of the eyes

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

Unconsciousness

With long-term contact:

Drying of the skin.

Dermatitis (skin inflammation)

Ingestion:

Nausea

Vomiting

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Danger of aspiration Oedema of the lungs

chemical pneumonitis (condition similar to pneumonia)

Other dangerous properties cannot be ruled out.

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

Gastric lavage (stomach washing) only under endotracheal intubation.

Subsequent observation for pneumonia and pulmonary oedema.

Pulmonary oedema prophylaxis

## **SECTION 5: Firefighting measures**

# 5.1 Extinguishing media Suitable extinguishing media

CO<sub>2</sub>

Extinction powder Water jet spray Alcohol resistant foam

#### 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 gases

Danger of bursting (explosion) when heated

Explosive vapour/air or gas/air mixtures.

## 5.3 Advice for firefighters

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

Protective respirator with independent air supply.

According to size of fire

Full protection, if necessary.

Cool container at risk with water.

Dispose of contaminated extinction water according to official regulations.

#### 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.

If applicable, caution - risk of slipping.

## 6.2 Environmental precautions

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

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

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.

Without adequate ventilation, formation of explosive mixtures may be possible.

Active substance:

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.

Avoid inhalation of the vapours.

Avoid contact with eyes or skin.

Keep away from sources of ignition - Do not smoke.

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Take measures against electrostatic charging, if appropriate.

Do not use on hot surfaces.

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.

Not to be stored in gangways or stair wells.

Store product closed and only in original packing.

Do not store with flammable or self-igniting materials.

Observe special regulations for aerosols!

Observe special storage conditions.

Keep protected from direct sunlight and temperatures over 50°C.

Store in a well ventilated place.

Store cool.

#### 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): 1000 mg/m3

Chemical Name Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-nexane	
	ntent %:10- <20
WEL-TWA: 1400 mg/m3 WEL-STEL:	
Monitoring procedures: - Compur - KITA-187 S (551 174)	
BMGV: Other information: (WEL acc. to R method, EH40)	RCP-
Chemical Name  Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	ntent %:10- <20
OELV-8h: 400 ppm (1590 mg/m3) (naphtha) OELV-15min:	
Monitoring procedures: - Compur - KITA-187 S (551 174)	
BLV: Other information:	
Chemical Name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Con	ntent %:5-10
WEL-TWA: 800 mg/m3	10111 7010 10
Monitoring procedures: - Draeger - Hydrocarbons 2/a (81 03 581)	
- Draeger - Hydrocarbons 0,1%/c (81 03 571)	
- Compur - KITA-187 S (551 174)	
BMGV: Other information: (WEL acc. to R method, EH40)	RCP-
Chemical Name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Con	ntent %:5-10
Chemical Name Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics Con OELV-8h: 1200 mg/m3 (AGW) OELV-15min: 2(II) (AGW)	ntent %:5-10
<b>,</b> , , , , , , , , , , , , , , , , , ,	ntent %:5-10
OELV-8h: 1200 mg/m3 (AGW) OELV-15min: 2(II) (AGW)	ntent %:5-10
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         - Draeger - Hydrocarbons 0,1%/c (81 03 571)           - Compur - KITA-187 S (551 174)         - Compur - KITA-187 S (551 174)	ntent %:5-10
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         -           - Draeger - Hydrocarbons 0,1%/c (81 03 571)	ntent %:5-10
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         -         - Draeger - Hydrocarbons 0,1%/c (81 03 571)         - Compur - KITA-187 S (551 174)           BLV:         Other information:	
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         -         - Draeger - Hydrocarbons 0,1%/c (81 03 571)         - Compur - KITA-187 S (551 174)           BLV:          Other information:            ©         Chemical Name         Hydrocarbons, C6, isoalkanes, <5% n-hexane	ntent %:5-10
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         -         - Draeger - Hydrocarbons 0,1%/c (81 03 571)         - Compur - KITA-187 S (551 174)           BLV:          Other information:            ©         Chemical Name         Hydrocarbons, C6, isoalkanes, <5% n-hexane	
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         -         - Draeger - Hydrocarbons 0,1%/c (81 03 571)         - Compur - KITA-187 S (551 174)           BLV:         Other information:            © Chemical Name         Hydrocarbons, C6, isoalkanes, <5% n-hexane	
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         -         - Draeger - Hydrocarbons 0,1%/c (81 03 571)         - Compur - KITA-187 S (551 174)           BLV:          Other information:            © Chemical Name         Hydrocarbons, C6, isoalkanes, <5% n-hexane	
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)         - Draeger - Hydrocarbons 0,1%/c (81 03 571)           - Compur - KITA-187 S (551 174)         Other information:	ntent %:5-10
OELV-8h:         1200 mg/m3 (AGW)         OELV-15min:         2(II) (AGW)            Monitoring procedures:         - Draeger - Hydrocarbons 2/a (81 03 581)            - Draeger - Hydrocarbons 0,1%/c (81 03 571)         - Compur - KITA-187 S (551 174)           BLV:         Other information:	ntent %:5-10

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- WEL-TWA = Workplace Exposure Limit Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).
- (8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). | WEL-STEL = Workplace Exposure Limit Short-term exposure limit (15-minute reference period).
- (8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | 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.
- © OELV-8h = Occupational Exposure Limit Value (8-hour reference period). (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction.
- (8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). | OELV-15min = Occupational Exposure Limit Value (15-minute reference period). (IFV) = Inhalable Fraction and Vapour. (I) = Inhalable Fraction. (R) = Respirable Fraction.
- (8) = Inhalable fraction (2017/164/EU). (9) = Respirable fraction (2017/164/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BLV = Biological limit value | Other information: Carc1A, Carc1B = carcinogenic substance, Cat. 1A or 1B. Muta1A, Muta1B = mutagenic substance, Cat. 1A or 1B. Repr1A, Repr1B = Substances known to be toxic for reproduction, Cat. 1A or 1B. Sk = can be absorbed through skin. Asphx = asphyxiant. Sen = Respiratory sensitizer. BOELV = Binding Occupational Exposure Limit Values.

#### 8.2 Exposure controls

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane							
Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note	
Consumer	Human - oral	Long term, systemic effects	DNEL	699	mg/kg bw/day		
Consumer	Human - dermal	Long term, systemic effects	DNEL	699	mg/kg bw/day		
Consumer	Human - inhalation	Long term, systemic effects	DNEL	608	mg/kg bw/day		
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	773	mg/kg bw/day		
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	2035	mg/kg bw/day		

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics							
Area of application	Exposure route / Environmental compartment		Descripto r	Value	Unit	Note	
Consumer	Human - oral	Long term, systemic effects	DNEL	149	mg/kg bw/day		
Consumer	Human - dermal	Long term, systemic effects	DNEL	149	mg/kg bw/day		
Consumer	Human - inhalation	Long term, systemic effects	DNEL	447	mg/m3		
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day		
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	2085	mg/m3		

Hydrocarbons, C6, isoalkanes, <5% n-hexane							
Area of application	Exposure route /	Effect on health	Descripto	Value	Unit	Note	
	Environmental		r				
	compartment						
Consumer	Human - oral	Long term, systemic effects	DNEL	1301	mg/kg bw/day		
Consumer	Human - dermal	Long term, systemic effects	DNEL	1377	mg/kg bw/day		
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1131	mg/m3		
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	13964	mg/kg bw/day		



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Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5306	mg/m3	
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Copper						
Area of application	Exposure route / Environmental compartment	Effect on health	Descripto r	Value	Unit	Note
	Environment - freshwater		PNEC	7,8	μg/l	
	Environment - marine		PNEC	5,2	μg/l	
	Environment - sediment, freshwater		PNEC	87	mg/kg dry weight	
	Environment - sediment, marine		PNEC	676	mg/kg dry weight	
	Environment - soil		PNEC	65,5	mg/kg dry weight	
	Environment - sewage treatment plant		PNEC	230	µg/l	

#### 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. BS EN 14042.

BS 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:

With danger of contact with eyes.

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

Skin protection - Hand protection:

Normally not necessary.

with long-term contact:

If applicable

Protective nitrile gloves (EN 374)

Protective gloves made of polyvinyl alcohol (EN 374)

Protective Viton® / fluoroelastomer gloves (EN 374)

Minimum layer thickness in mm:

>= 0,4

Permeation time (penetration time) in minutes:

>= 480

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.

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

Protective hand cream recommended.

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.

Filter A2 P2 (EN 14387), code colour brown, white

At high concentrations:

Respiratory protection appliance (insulation device) (e.g. EN 137 or EN 138)

Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:



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#### Not applicable

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.

### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state: Aerosol. Active substance: liquid.

Colour: Copper Odour: Characteristic Odour threshold: Not determined

pH-value: n.a.

Melting point/freezing point: Not determined

Initial boiling point and boiling range:

n.a.

Flash point:

n.a.

Not determined Evaporation rate: Flammability (solid, gas): Not determined Lower explosive limit: 0,8 Vol-% 9.0 Vol-% Upper explosive limit: Not determined Vapour pressure: Vapour density (air = 1): Not determined Density: Not determined Bulk density: Not determined Solubility(ies): Not determined Water solubility: Insoluble Partition coefficient (n-octanol/water): Not determined Auto-ignition temperature: Not determined Decomposition temperature: Not determined Viscosity: Not determined Explosive properties: Not determined

Oxidising properties: No

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Surface tension:

Solvents content:

Not determined
Not determined
Not determined
Not determined
Not determined

#### **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The product has not been tested.

#### 10.2 Chemical stability

Stable with proper storage and handling.

## 10.3 Possibility of hazardous reactions

No dangerous reactions are known.

#### 10.4 Conditions to avoid

Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

### 10.5 Incompatible materials

Avoid contact with strong oxidizing agents.

#### 10.6 Hazardous decomposition products

No decomposition when used as directed.



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## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

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

2 IN ONE A sati Caira Carra		See Oction	Z. i (ciassilicat	1011).		
3-IN-ONE® Anti-Seize Coppe						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal						n.d.a.
route:						
Acute toxicity, by inhalation:						n.d.a.
Skin corrosion/irritation:						n.d.a.
Serious eye						n.d.a.
damage/irritation:						
Respiratory or skin						n.d.a.
sensitisation:						
Germ cell mutagenicity:						n.d.a.
Carcinogenicity:						n.d.a.
Reproductive toxicity:						n.d.a.
Specific target organ toxicity -						n.d.a.
single exposure (STOT-SE):						
Specific target organ toxicity -						n.d.a.
repeated exposure (STOT-						
RÉ):						
Aspiration hazard:						n.d.a.
Symptoms:						n.d.a.

Hydrocarbons, C7, n-alkane	Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics							
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat				
Acute toxicity, by oral route:	LD50	>8	ml/kg	Rat	OECD 401 (Acute Oral Toxicity)			
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat				
Acute toxicity, by dermal route:	LD50	>=4	ml/kg	Rat	OECD 402 (Acute Dermal Toxicity)			
Acute toxicity, by inhalation:	LC50	>23,3	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)			
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Irritant		
Aspiration hazard:						Yes		
Symptoms:						diarrhoea, headaches, dizziness, nausea and		
						vomiting.		

Hydrocarbons, C6, isoalkanes, <5% n-hexane								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Acute toxicity, by oral route:	LD50	>16750	mg/kg	Rat	OECD 401 (Acute			
					Oral Toxicity)			
Acute toxicity, by dermal	LD50	>3350	mg/kg	Rabbit	OECD 402 (Acute			
route:					Dermal Toxicity)			
Acute toxicity, by inhalation:	LC50	259354	mg/m3	Rat	OECD 403 (Acute			
					Inhalation Toxicity)			
Skin corrosion/irritation:						Irritant		
Respiratory or skin				Mouse	OECD 429 (Skin	No (skin		
sensitisation:					Sensitisation - Local	contact)		
					Lymph Node Assay)			
Aspiration hazard:						Yes		



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Symptoms:		drowsiness,
		unconsciousnes
		s,
		heart/circulatory
		disorders,
		headaches,
		cramps,
		drowsiness,
		mucous
		membrane
		irritation,
		dizziness,
		nausea and
		vomiting.

Petroleum gases, liquified						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by inhalation:	LC50	>5	ma/l			

## **SECTION 12: Ecological information**

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

3-IN-ONE® Anti-Seize	Copper Greas	е					
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:							n.d.a.
12.1. Toxicity to							n.d.a.
daphnia:							
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and							Isolate as
degradability:							much as
							possible with
							an oil separator.
12.3. Bioaccumulative							n.d.a.
potential:							
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT							n.d.a.
and vPvB assessment							
12.6. Other adverse							n.d.a.
effects:							
Other information:							According to
							the recipe,
							contains no
							AOX.

Hydrocarbons, C7, n-alkanes, isoalkanes, cyclics							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>13,4	mg/l	Oncorhynchus	OECD 203	
					mykiss	(Fish, Acute	
						Toxicity Test)	
12.1. Toxicity to	EL50	24h	12	mg/l	Daphnia magna	OECD 202	
daphnia:						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to	LC50	48h	3	mg/l	Daphnia magna	OECD 202	
daphnia:						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	EL50	72h	12	mg/l	Pseudokirchnerie	OECD 201	
					lla subcapitata	(Alga, Growth	
						Inhibition Test)	

Hydrocarbons, C6, isoalkanes, <5% n-hexane								
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes	

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12.1. Toxicity to fish:	LC50	48h	>1	mg/l	Oryzias latipes		Analogous conclusion
12.1. Toxicity to fish:	NOEC/NOEL	28d	4,09	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	EC50	48h	31,9	mg/l	Daphnia magna	QSAR	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	7,14	mg/l	Daphnia magna	QSAR	
12.1. Toxicity to daphnia:	LC50	48h	3,87	mg/l	Daphnia magna		Analogous conclusion
12.1. Toxicity to algae:	NOELR	72h	30	mg/l	Raphidocelis subcapitata		
12.1. Toxicity to algae:	ErC50	72h	55	mg/l	Pseudokirchnerie Ila subcapitata		Analogous conclusion
12.1. Toxicity to algae:	EC50	72h	13,56	mg/l	Pseudokirchnerie Ila subcapitata	QSAR	
12.2. Persistence and degradability:		28d	98	%			Readily biodegradable (Analogous conclusion)
12.3. Bioaccumulative potential:	Log Kow		4				,
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Petroleum gases, liquified							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	147,54	mg/l		QSAR	

## **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)

07 06 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Take full aerosol cans to problem waste collection.

Take emptied aerosol cans to valuable material collection.

#### For contaminated packing material

Pay attention to local and national official regulations.

Recommendation:

Do not perforate, cut up or weld uncleaned container.

Recycling

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):

14.4. Packing group:

Classification code:

LQ:

5F

LQ:

1 L

14.5. Environmental hazards: Not applicable

Tunnel restriction code:





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

14.2. UN proper shipping name:

**AEROSOLS** 

14.3. Transport hazard class(es):
2.1
14.4. Packing group:

EmS: F-D, S-U
Marine Pollutant: n.a

14.5. Environmental hazards:

Not applicable

**Transport by air (IATA)** 

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



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 national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!

Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be

considered according to storage, handling etc.):

Hazard categories	Notes to Annex I	Qualifying quantity (tonnes) of	Qualifying quantity (tonnes) of
		dangerous substances as	dangerous substances as
		referred to in Article 3(10) for	referred to in Article 3(10) for
		the application of - Lower-tier	the application of - Upper-tier
		requirements	requirements
P3a	11.1	150 (netto)	500 (netto)
<del>  </del>		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 65 %

Observe incident regulations.

#### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

#### **SECTION 16: Other information**

**EU F0008** 

Revised sections: 2, 3, 8, 11, 12, 15

Employee training in handling dangerous goods is required.

These details refer to the product as it is delivered.

Employee instruction/training in handling hazardous materials is required.

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







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Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Irrit. 2, H315	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.
Aerosol 1, H222	Classification according to calculation procedure.
Aerosol 1, H229	Classification based on the form or physical state.

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.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Skin Irrit. — Skin irritation

Asp. Tox. — Aspiration hazard

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Aerosol — Aerosols

Flam. Liq. — Flammable liquid STOT SE — Specific target organ toxicity - single exposure - narcotic effects

Acute Tox. — Acute toxicity - oral

Aquatic Acute — Hazardous to the aquatic environment - acute

## 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 Article number Art., Art. no.

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)

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

body weight bw

Chemical Abstracts Service CAS

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

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 Page 15 of 16
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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

IUCLIDInternational 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

LOAELLowest 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 applicablen.av. not availablen.c. not checkedn.d.a. no data available

NIOSHNational 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)



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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) (FH40. UK).

WHO World Health Organization

wwt wet weight

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.

These statements were made by:

## Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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