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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 25.05.2018 / 0007
Replacing version dated / version: 02.12.2016 / 0006
Valid from: 25.05.2018
PDF print date: 25.05.2018
3-IN-ONE® Heavy Duty Cleaner Degreaser

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® Heavy Duty Cleaner Degreaser

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

Relevant identified uses of the substance or mixture:

Degreaser

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

(IRL)

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:

(IRL)

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

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

Hazard class	Hazard category	Hazard statement
Eye Irrit.	2	H319-Causes serious eye irritation.
Skin Sens.	1	H317-May cause an allergic skin reaction.
Aquatic Chronic	3	H412-Harmful to aquatic life with long lasting effects.
Aerosol	1	H222-Extremely flammable aerosol.
Aerosol	1	H229-Pressurised container: May burst if heated.

2.2 Label elements

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

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Danger

H319-Causes serious eye irritation. H317-May cause an allergic skin reaction. 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. P261-Avoid breathing vapours or spray. P280-Wear protective gloves and eye protection / face protection.

P314-Get medical advice / attention if you feel unwell.

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.

Sweet orange extract

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, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119463258-33-XXXX
Index	---
EINECS, ELINCS, NLP	919-857-5 (REACH-IT List-No.)
CAS	---
content %	1-<10
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H336

Sweet orange extract	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP	232-433-8
CAS	8028-48-6
content %	2,5-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411

2-Butoxyethanol	Substance for which an EU exposure limit value applies.
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Registration number (REACH)	01-2119475108-36-XXXX
Index	603-014-00-0
EINECS, ELINCS, NLP	203-905-0
CAS	111-76-2
content %	1-<5
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315 Acute Tox. 4, H312 Acute Tox. 4, H332

Alcohols, C9-11, ethoxylated	
Registration number (REACH)	---
Index	---
EINECS, ELINCS, NLP	---
CAS	68439-46-3
content %	1-<3
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 4, H302 Eye Dam. 1, H318

Ammonia	Substance for which an EU exposure limit value applies.
Registration number (REACH)	01-2119982985-14-XXXX
Index	007-001-01-2
EINECS, ELINCS, NLP	215-647-6
CAS	1336-21-6
content %	0,1-<1
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Corr. 1B, H314 Aquatic Acute 1, H400 (M=1) Eye Dam. 1, H318

Impurities, test data and additional information may have been taken into account in classifying and labelling the product. 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.

If, for example, the note P is applied for a hydrocarbon then this has already been taken into account for the classification named here.

Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7)."

Article 4 of the regulation (EC) no. 1272/2008 (CLP regulation) was also observed and taken into account for the classification named here.

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.

4.2 Most important symptoms and effects, both acute and delayed

Fatigue

Mental confusion

Headaches

Dizziness

Allergic reaction

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

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

n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2

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

Oxides of sulphur

Oxides of nitrogen

Toxic pyrolysis products.

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.

Flush residue using copious water.

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.
- 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!
- Store cool.
- Keep protected from direct sunlight and temperatures over 50°C.
- Store in a well ventilated place.
- 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/m³

Chemical Name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		Content %:1-<10
WEL-TWA: 800 mg/m ³	WEL-STEL: ---	---	
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 RCP-method, EH40)		

Chemical Name	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics		Content %:1-<10
OELV-8h: 100 ppm (573 mg/m ³) (White Spirit)	OELV-15min: 125 ppm (720 mg/m ³) (White Spirit)	---	
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	2-Butoxyethanol		Content %:1-<5
WEL-TWA: 25 ppm (123 mg/m ³) (WEL), 20 ppm (98 mg/m ³) (EU)	WEL-STEL: 50 ppm (246 mg/m ³) (WEL, EU)	---	
Monitoring procedures:	- Compur - KITA-190 U(C) (548 873) DFG (D) (Lösungsmittelgemische 3), DFG (E) (Solvent mixtures 3) - 1998, - 2002 - EU project BC/CEN/ENTR/000/2002-16 card 32-2 (2004)		
BMGV: 240 mmol butoxyacetic acid/mol creatinine in urine, post shift (BMGV)	Other information: Sk (WEL)		

Chemical Name	2-Butoxyethanol		Content %:1-<5
OELV-8h: 20 ppm (98 mg/m ³) (OELV-8h, EC)	OELV-15min: 50 ppm (246 mg/m ³) (OELV-15min, EC)	---	

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Monitoring procedures:	- Compur - KITA-190 U(C) (548 873) DFG (D) (Lösungsmittelgemische 3), DFG (E) (Solvent mixtures 3) - 1998, - 2002 - EU project BC/CEN/ENTR/000/2002-16 card 32-2 (2004)
BLV: 200 mg/g creatinine (Butoxyacetic acid (BAA) in urine, h) (ACGIH-BEI)	Other information: Sk, IOELV

Chemical Name	Ammonia	Content %:0,1- <1
WEL-TWA: NH3 25 ppm (18 mg/m3) (WEL), 20 ppm (14 mg/m3) (EU)	WEL-STEL: NH3 35 ppm (25 mg/m3) (WEL), 50 ppm (36 mg/m3) (EU)	---
Monitoring procedures:	---	---
BMGV: ---	Other information: ---	---

Chemical Name	Ammonia	Content %:0,1- <1
OELV-8h: NH3 20 ppm (14 mg/m3) (OELV-8h, EC)	OELV-15min: NH3 50 ppm (36 mg/m3) (OELV-15min, EC)	---
Monitoring procedures:	---	---
BLV: ---	Other information: IOELV	---

Chemical Name	Petroleum gases, liquified	Content %:
WEL-TWA: 1000 ppm (1750 mg/m3) (Liquefied petroleum gas (LPG))	WEL-STEL: 1250 ppm (2180 mg/m3) (Liquefied petroleum gas (LPG))	---
Monitoring procedures:	---	---
BMGV: ---	Other information: ---	---

Chemical Name	Petroleum gases, liquified	Content %:
OELV-8h: 1000 ppm (1800 mg/m3)	OELV-15min: 1250 ppm (2250 mg/m3)	---
Monitoring procedures:	---	---
BLV: ---	Other information: ---	---

(GB) 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.

(IRL) OELV-8h = Occupational Exposure Limit Value (8-hr 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. IOELV = Indicative Occupational Exposure Limit Values.

8.2 Exposure controls

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
Consumer	Human - oral	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	300	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	900	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	125	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	185	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	125	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	1500	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	208	mg/kg bw/day	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	871	mg/m ³	

2-Butoxyethanol						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	8,8	mg/l	
	Environment - marine		PNEC	0,88	mg/l	
	Environment - sediment, freshwater		PNEC	34,6	mg/kg dw	
	Environment - soil		PNEC	2,8	mg/kg dw	
	Environment - sewage treatment plant		PNEC	463	mg/l	
	Environment - sediment, marine		PNEC	3,46	mg/kg dw	
	Environment - sporadic (intermittent) release		PNEC	9,1	mg/l	
Consumer	Human - dermal	Short term, systemic effects	DNEL	44,5	mg/kg bw/d	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	426	mg/m ³	
Consumer	Human - oral	Short term, systemic effects	DNEL	13,4	mg/kg bw/d	
Consumer	Human - inhalation	Short term, local effects	DNEL	123	mg/m ³	
Consumer	Human - dermal	Long term, systemic effects	DNEL	38	mg/kg bw/d	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	49	mg/m ³	
Consumer	Human - oral	Long term, systemic effects	DNEL	3,2	mg/kg bw/d	
Workers / employees	Human - dermal	Short term, systemic effects	DNEL	89	mg/kg bw/d	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	663	mg/m ³	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	246	mg/m ³	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	75	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	98	mg/m ³	

Sweet orange extract						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - soil		PNEC	0,261	mg/kg dw	
	Environment - sewage treatment plant		PNEC	2,1	mg/l	
	Environment - freshwater		PNEC	0,0054	mg/l	
	Environment - marine		PNEC	0,00054	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	5,77	µg/l	
	Environment - sediment, freshwater		PNEC	1,3	mg/kg dw	
	Environment - sediment, marine		PNEC	0,13	mg/kg dw	

Consumer	Human - oral	Long term, systemic effects	DNEL	4,44	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	4,44	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	7,78	mg/m3	
Workers / employees	Human - inhalation	Long term	DNEL	31,1	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,89	mg/kg bw/day	

Ammonia						
Area of application	Exposure route / Environmental compartment	Effect on health	Descriptor	Value	Unit	Note
	Environment - freshwater		PNEC	0,0011	mg/l	
	Environment - marine		PNEC	0,0011	mg/l	
	Environment - water, sporadic (intermittent) release		PNEC	0,0068	mg/l	
Industrial	Human - inhalation	Long term, local effects	DNEL	14	mg/m3	
Industrial	Human - inhalation	Long term, systemic effects	DNEL	47,6	mg/m3	
Industrial	Human - dermal	Long term, systemic effects	DNEL	6,8	mg/kg bw/day	
Industrial	Human - inhalation	Short term, local effects	DNEL	36	mg/m3	
Industrial	Human - inhalation	Short term, systemic effects	DNEL	47,6	mg/m3	
Industrial	Human - dermal	Short term, systemic effects	DNEL	6,8	mg/kg bw/day	
Consumer	Human - inhalation	Long term, local effects	DNEL	2,8	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	6,8	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	6,8	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	23,8	mg/m3	
Consumer	Human - inhalation	Short term, local effects	DNEL	7,2	mg/m3	
Consumer	Human - oral	Short term, local effects	DNEL	6,8	mg/kg bw/day	
Consumer	Human - dermal	Short term, systemic effects	DNEL	6,5	mg/kg bw/day	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	23,8	mg/m3	

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:

Chemical resistant protective gloves (EN 374).

If applicable

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

0,5

Permeation time (penetration time) in minutes:

480

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

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

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:

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	Aerosol. Active substance: liquid.
Colour:	White
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):	Not determined
Lower explosive limit:	0,8 Vol-%
Upper explosive limit:	9,0 Vol-%
Vapour pressure:	Not determined
Vapour density (air = 1):	Not determined
Density:	Not determined
Bulk density:	Not determined
Solubility(ies):	Not determined
Water solubility:	Mixable
Partition coefficient (n-octanol/water):	Not determined
Auto-ignition temperature:	Not determined
Decomposition temperature:	Not determined
Viscosity:	Not determined

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Explosive properties:

Possible build up of explosive/highly flammable vapour/air mixture. Product is not explosive.

Oxidising properties:

No

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

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No decomposition if used as intended.

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.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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

3-IN-ONE® Heavy Duty Cleaner Degreaser

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:	ATE	>20	mg/l/4h			calculated value, Vapours
Acute toxicity, by inhalation:	ATE	>5	mg/l/4h			calculated value, Aerosol
Skin corrosion/irritation:						n.d.a.
Serious eye damage/irritation:						n.d.a.
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:						n.d.a.
Symptoms:						n.d.a.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	
Acute toxicity, by dermal route:	LD50	4000	mg/kg	Rat	OECD 402 (Acute Dermal Toxicity)	

Acute toxicity, by inhalation:	LD50	>18,5	mg/l/4h	Rat	OECD 403 (Acute Inhalation Toxicity)	
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosion)	Not irritant, Repeated exposure may cause skin dryness or cracking.
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:					OECD 471 (Bacterial Reverse Mutation Test)	Negative, Analogous conclusion
Carcinogenicity:					OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies)	Negative, Analogous conclusion
Reproductive toxicity:					OECD 414 (Prenatal Developmental Toxicity Study)	Negative, Analogous conclusion
Specific target organ toxicity - single exposure (STOT-SE):						May cause drowsiness or dizziness.
Aspiration hazard:						Yes
Symptoms:						unconsciousness, headaches, dizziness, discoloration of the skin, vomiting, diarrhoea
Specific target organ toxicity - repeated exposure (STOT-RE), oral:					OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	Not to be expected

Sweet orange extract

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit		
Skin corrosion/irritation:				Rabbit		Irritant
Respiratory or skin sensitisation:				Mouse	OECD 429 (Skin Sensitisation - Local Lymph Node Assay)	Yes (skin contact)
Aspiration hazard:						Yes
Symptoms:						mucous membrane irritation

2-Butoxyethanol

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	1746	mg/kg	Rat	OECD 401 (Acute Oral Toxicity)	
Acute toxicity, by dermal route:	LD50	2275	mg/kg	Rabbit	OECD 402 (Acute Dermal Toxicity)	Does not conform with EU classification.
Acute toxicity, by inhalation:	LC50	2-20	mg/l	Rat		
Skin corrosion/irritation:				Rabbit	Regulation (EC) 440/2008 B.4 (DERMAL IRRITATION/CORROSION)	Skin Irrit. 2, Product removes fat.

Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosion)	Eye Irrit. 2
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	Not sensitising
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian Erythrocyte Micronucleus Test)	Negative
Germ cell mutagenicity:				Salmonella typhimurium	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:				Rat	OECD 451 (Carcinogenicity Studies)	Negative
Carcinogenicity:	NOAEC	125	ppm	Mouse	OECD 451 (Carcinogenicity Studies)	Negative
Aspiration hazard:						No
Symptoms:						acidosis, ataxia, breathing difficulties, respiratory distress, drowsiness, unconsciousness, annoyance, coughing, headaches, gastrointestinal disturbances, insomnia, mucous membrane irritation, dizziness
Specific target organ toxicity - repeated exposure (STOT-RE), oral:	NOAEL	<69	mg/kg bw/d	Rat	OECD 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)	
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	>150	mg/kg bw/d	Rabbit	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

Alcohols, C9-11, ethoxylated

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	300-2000	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	>20,1	mg/l/4h			
Skin corrosion/irritation:						Not irritant
Serious eye damage/irritation:						Risk of serious damage to eyes.
Respiratory or skin sensitisation:						Not sensitising
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	250	mg/kg			

Ammonia

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
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12.2. Persistence and degradability:							The surfactant(s) contained in this mixture complies (comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
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, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOELR	28d	0,13	mg/l	Oncorhynchus mykiss	QSAR	
12.1. Toxicity to daphnia:	EC50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.3. Bioaccumulative potential:			5-6,7				High
12.1. Toxicity to fish:	LC50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to algae:	ErC50	72h	>1000	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	EbC50	72h	>1000	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOELR	72h	100	mg/l	Raphidocelis subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOELR	72h	100	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	

12.2. Persistence and degradability:		28d	80	%		OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.1. Toxicity to daphnia:	NOELR	21d	0,23	mg/l	Daphnia magna	QSAR	
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance

Sweet orange extract							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	NOEC/NOEL	96h	4,0	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	EL50	96h	2,4-3,1	mg/l	Brachydanio rerio	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	LC50	96h	0,7	mg/l	Pimephales promelas	OECD 203 (Fish, Acute Toxicity Test)	
12.2. Persistence and degradability:		28d	100	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	48h	0,48	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	50	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	72-83,4	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
12.1. Toxicity to daphnia:	EC50	48h	0,67	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to algae:	EC50	72h	150	mg/l	Desmodesmus subspicatus	OECD 201 (Alga, Growth Inhibition Test)	
12.4. Mobility in soil:							Product is slightly volatile., Biodegradable
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Other information:							Does not contain any organically bound halogens which can contribute to the AOX value in waste water.

2-Butoxyethanol							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes

12.1. Toxicity to fish:	LC50	96h	1474	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOEC/NOEL	21d	>100	mg/l	Brachydanio rerio	OECD 204 (Fish, Prolonged Toxicity Test - 14-Day Study)	
12.1. Toxicity to fish:	LC50	96h	1490	mg/l	Lepomis macrochirus		
12.1. Toxicity to daphnia:	EC50	48h	1550	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	100	mg/l	Daphnia magna	OECD 211 (Daphnia magna Reproduction Test)	
12.1. Toxicity to algae:	EC50	72h	1840	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	286	mg/l	Pseudokirchneriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	95	%		OECD 301 E (Ready Biodegradability - Modified OECD Screening Test)	
12.2. Persistence and degradability:		28d	>99	%		OECD 302 B (Inherent Biodegradability - Zahn-Wellens/EMPA Test)	
12.3. Bioaccumulative potential:	BCF		3,2				
12.3. Bioaccumulative potential:	Log Pow		0,83				Negative
12.4. Mobility in soil:	H (Henry)		0,0000016	atm*m3/mol			
12.4. Mobility in soil:	Koc		67				Expert judgement
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	EC0	16h	700	mg/l	Pseudomonas putida	DIN 38412 T.8	

Alcohols, C9-11, ethoxylated

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.3. Bioaccumulative potential:							Not to be expected
12.1. Toxicity to fish:	LC50	96h	11	mg/l			
12.1. Toxicity to fish:	LC50	96h	1-10	mg/l			
12.1. Toxicity to daphnia:	EC50	48h	1-10	mg/l			
12.1. Toxicity to daphnia:	EC50	48h	1-10	mg/l	Daphnia magna		
12.1. Toxicity to algae:	EC50	72h	1-10	mg/l	Skeletonema costatum		
12.2. Persistence and degradability:		28d	>60	%		OECD 301 B (Ready Biodegradability - Co2 Evolution Test)	Readily biodegradable
Toxicity to bacteria:	EC50		>100	mg/l			

Toxicity to bacteria:	EC50	4h	410	mg/l			Analogous conclusion
Water solubility:							Soluble

Ammonia							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	8,2	mg/l	Pimephales promelas		
12.1. Toxicity to fish:	LC50	96h	0,53	mg/l	Oncorhynchus mykiss		Anhydrous substance
12.1. Toxicity to daphnia:	EC50	48h	0,66	mg/l	Daphnia pulex		
12.1. Toxicity to daphnia:	EC50	48h	1,16	mg/l	Daphnia pulicaria		Anhydrous substance
12.2. Persistence and degradability:		28d	<70	%			Not readily biodegradable
12.3. Bioaccumulative potential:							Not to be expected
Toxicity to bacteria:	EC50	5min	1,16	mg/l	Photobacterium phosphoreum		Anhydrous 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 01 aqueous washing liquids and mother liquors

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

20 01 29 detergents containing hazardous substances

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

E.g. suitable incineration plant.

E.g. dispose at suitable refuse site.

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): 2.1

14.4. Packing group: -

Classification code: 5F

LQ: 1 L

14.5. Environmental hazards: Not applicable

Tunnel restriction code: D

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

AEROSOLS (NAPHTHA (PETROLEUM),D-LIMONENE)



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 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
 Revision date / version: 25.05.2018 / 0007
 Replacing version dated / version: 02.12.2016 / 0006
 Valid from: 25.05.2018
 PDF print date: 25.05.2018
 3-IN-ONE® Heavy Duty Cleaner Degreaser

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



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

Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!

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 dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements	Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements
P3a	11.1	150 (netto)	500 (netto)

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): < 19,4 %

REGULATION (EC) No 648/2004

5 % or over but less than 15 %

aliphatic hydrocarbons

less than 5 %

anionic surfactants

non-ionic surfactants

perfumes

LIMONENE

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

EU F0009

Revised sections: 2, 3, 4, 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):

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Eye Irrit. 2, H319	Classification according to calculation procedure.
Skin Sens. 1, H317	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).

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Eye Irrit. — Eye irritation

Skin Sens. — Skin sensitization

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Aerosol — Aerosols

Flam. Liq. — Flammable liquid

Asp. Tox. — Aspiration hazard

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

Skin Irrit. — Skin irritation

Acute Tox. — Acute toxicity - oral

Acute Tox. — Acute toxicity - dermal

Acute Tox. — Acute toxicity - inhalation

Eye Dam. — Serious eye damage

Skin Corr. — Skin corrosion

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

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
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
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

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:

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