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

Revision date / version: 24.04.2018 / 0011

Replacing version dated / version: 05.09.2017 / 0010

Valid from: 24.04.2018 PDF print date: 05.07.2018 Closing cylinder care spray 50 ml

Art.: 146700

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

Closing cylinder care spray 50 ml Art.: 146700

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

Relevant identified uses of the substance or mixture:

Lubricant

Sector of use [SU]:

SU 0 - Other

SU 1 - Agriculture, forestry, fishery

SU18 - Manufacture of furniture

SU22 - Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Chemical product category [PC]:

PC24 - Lubricants, greases, release products

Process category [PROC]:

PROC11 - Non industrial spraying

Article Categories [AC]:

AC99 - Not required.

Environmental Release Category [ERC]:

ERC99 - Not required.

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

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Albert Berner Deutschland GmbH, Bernerstrasse 4, 74653 Künzelsau, Germany Phone:+49 79 40 12 10, Fax:+49 79 40 12 13 00 info@berner.de, www.berner.de

Details of the supplier of the safety data sheet see section 16 of this safety data sheet.

Qualified person's e-mail address: Productsafety.Chemicals@berner-group.com Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number



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Emergency information services / official advisory body:

Telephone number of the company in case of emergencies:

+49 (0) 221 80260 889 (09:00 - 17:00)

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
Skin Irrit.	2	H315-Causes skin irritation.
STOT SE	3	H336-May cause drowsiness or dizziness.
Aquatic	3	H412-Harmful to aquatic life with long
Chronic		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)





Danger

H315-Causes skin irritation. H336-May cause drowsiness or dizziness. H412-Harmful to aquatic life with long lasting effects. H222-Extremely flammable aerosol. H229-Pressurised container: May burst if heated.

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.

P312-Call a POISON CENTRE / doctor if you feel unwell.

P410+P412-Protect from sunlight. Do not expose to temperatures exceeding 50 °C.

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

2.3 Other hazards



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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

White mineral oil (Natural oil)	
Registration number (REACH)	01-2119487078-27-XXXX
Index	
EINECS, ELINCS, NLP	232-455-8
CAS	8042-47-5
content %	60-80
Classification according to Regulation (EC)	Asp. Tox. 1, H304
1272/2008 (CLP)	

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	921-024-6 (REACH-IT List-No.)
CAS	
content %	20-<25
Classification according to Regulation (EC)	Flam. Liq. 2, H225
1272/2008 (CLP)	Skin Irrit. 2, H315
	Aquatic Chronic 2, H411
	Asp. Tox. 1, H304
	STOT SE 3, H336

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

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



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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

Wash thoroughly using copious water - remove contaminated clothing immediately. If skin irritation occurs (redness etc.), consult 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. Consult doctor immediately.

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.

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

The following may occur:

Irritation of the eyes

Irritation of the respiratory tract

Coughing

Headaches

Dizziness

Effects/damages the central nervous system

With long-term contact:

Dermatitis (skin inflammation)

Drying of the skin.

Other dangerous properties cannot be ruled out.

4.3 Indication of any immediate medical attention and special treatment needed Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

CO2

Extinction powder

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



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Toxic gases

Danger of bursting (explosion) when heated

Explosive vapour/air or gas/air mixtures.

Dangerous vapours heavier than air.

In case of spreading near the ground, flashback to distance sources of ignition is possible.

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.

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.

6.3 Methods and material for containment and cleaning up

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

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.

Keep away from sources of ignition - Do not smoke.

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.



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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.

Observe special regulations for aerosols!

Observe special storage conditions.

Do not store with flammable or self-igniting materials.

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):

1400 mg/m3

© Chemical Name	Hydrocarbor hexane	ns, C6-C7, n-alkanes, isoalk	anes, cyclics, <5%	n-	Content %:20-<25
WEL-TWA: 1400 mg/m3		WEL-STEL:			
Monitoring procedures:	-	Compur - KITA-187 S (55:	1 174)		
BMGV:			Other information RCP-method, EH4		EL acc. to
© Chemical Name	Carbon diox	ide			Content %:1-5
WEL-TWA: 5000 ppm (91 (WEL), 5000 ppm (9000 mg		WEL-STEL: 15000 ppr mg/m3) (WEL)	n (27400		
Monitoring procedures:	- - - - - - - -	Compur - KITA-126 B (549) Compur - KITA-126 SA (54) Compur - KITA-126 SB (54) Compur - KITA-126 SF (54) Compur - KITA-126 SG (55) Compur - KITA-126 SH (56) Compur - KITA-126 UH (56) Draeger - Carbon Dioxide OSHA ID-172 (Carbon dioxide) NIOSH 6603 (Carbon dioxide)	49 467) 48 816) 49 491) 50 210) 49 509) 49 517) 100/a (81 01 811) 0,1%/a (CH 23 501 0,5%/a (CH 31 401 1%/a (CH 25 101) 5%/A (CH 20 301) xide in workplace a	.)	eres) - 1990
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). (8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU,



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2017/2398/EU). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).

(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/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.

8.2 Exposure controls

White mineral oil (Natural oil)										
Area of application	Exposure route / Environmental compartment	Descrip tor	Value	Unit	Note					
Consumer	Human - dermal	Long term, systemic effects	DNEL	92	mg/kg bw/day					
Consumer	Human - inhalation	Long term, systemic effects	DNEL	35	mg/m3					
Consumer	Human - oral	Long term, systemic effects	DNEL	40	mg/kg bw/day					
Workers / employees	Human - inhalation	Long term, local effects	DNEL	160	mg/m3					
Workers / employees	Human - dermal	Long term, local effects	DNEL	220	mg/kg					
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	220	mg/kg bw/day					
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	160	mg/m3					

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane										
Area of application	Exposure route / Environmental compartment	Effect on health	Descrip tor	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					

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.



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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:

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

Skin protection - Hand protection:

Protective nitrile gloves (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 16523-1 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.

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:

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.



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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. 20°C

Colour: Turbid
Odour: Odourless
Odour threshold: Not determined

pH-value: n.a.

Melting point/freezing point:

Not determined
Initial boiling point and boiling range:

Not determined

Flash point: <0 °C

Evaporation rate:

Flammability (solid, gas):

Lower explosive limit:

Upper explosive limit:

Vapour pressure:

Vapour density (air = 1):

Not determined

Not determined

Not determined

Density: 0,82 g/cm3 (20°C, Active substance)

Bulk density: n.a.

Solubility(ies):
Water solubility:
Partition coefficient (n-octanol/water):
Not determined
Not determined

Auto-ignition temperature: No

Decomposition temperature: Not determined

Viscosity: >20,5 mm2/s (40°C, Active substance)
Explosive properties: Product is not explosive. Possible build up of explosive/highly flammable vapour/air mixture.

Oxidising properties: No

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Not determined

Not determined

Surface tension:

Not determined

Not determined

Not determined

Solvents content:

Not determined

Chemical heat of combustion:

<20 kJ/g

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

See also section 7.



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Heating, open flame, ignition sources

Pressure increase will result in danger of bursting.

10.5 Incompatible materials

See also section 7.

Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products

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	Endpoi nt	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.	
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.	

White mineral oil (Natural oil)									
Toxicity / effect	Endpoi nt	Value	Unit	Organism	Test method	Notes			
Acute toxicity, by oral	LD50	>5000	mg/kg	Rat	OECD 401 (Acute				
route:					Oral Toxicity)				
Acute toxicity, by	LD50	>2000	mg/kg	Rabbit	OECD 402 (Acute				
dermal route:					Dermal Toxicity)				
Acute toxicity, by	LC50	>5000	mg/l/4	Rat	OECD 403 (Acute				
inhalation:			h		Inhalation				
					Toxicity)				



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70°	22	16	-50		9	9
Skin corrosion/irritation:				Rabbit	OECD 404 (Acute Dermal Irritation/Corrosio n)	Not irritant
Serious eye damage/irritation:				Rabbit	OECD 405 (Acute Eye Irritation/Corrosio n)	Not irritant
Respiratory or skin sensitisation:				Guinea pig	OECD 406 (Skin Sensitisation)	No (skin contact)
Germ cell mutagenicity:				Salmonella typhimuri um	OECD 471 (Bacterial Reverse Mutation Test)	Negative
Carcinogenicity:	NOAEL	>1200	mg/kg	Rat	OECD 453 (Combined Chronic Toxicity/Carcinoge nicity Studies)	Negative
Reproductive toxicity:					OECD 415 (One- Generation Reproduction Toxicity Study)	Negative
Reproductive toxicity:	NOAEL	>=1000	mg/kg bw/d	Rat	OECD 421 (Reproduction/De velopmental Toxicity Screening Test)	Negative
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	>1200	mg/kg	Rat	OECD 453 (Combined Chronic Toxicity/Carcinoge nicity Studies)	
Specific target organ toxicity - repeated exposure (STOT-RE):	NOAEL	>1200	mg/kg		OECD 452 (Chronic Toxicity Studies)	
Aspiration hazard: Symptoms:	0.					Asp. Tox. 1 nausea and vomiting.
Specific target organ toxicity - single exposure (STOT-SE), dermal:	NOAEL	>1000	mg/kg	Rabbit	OECD 410 (Repeated Dose Dermal Toxicity - 90-Day)	vorneing.
Specific target organ toxicity - repeated exposure (STOT-RE), dermal:	NOAEL	>2000	mg/kg	Rat	OECD 411 (Subchronic Dermal Toxicity - 90-day Study)	

SECTION 12: Ecological information

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



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Art.: 146700 Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:			74.45	<u> </u>	or gamom	1 GSC III GCII GC	n.d.a.
12.1. Toxicity to daphnia:			,				n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and degradability:							n.d.a.
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:	AOX		<1	%			
Other information:							DOC- elimination degree(comp lexing organic substance)> = 80%/28d: n.a.

White mineral oil (Natural oil)									
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes		
12.1. Toxicity to	LC50	96h	>100	mg/l	Leuciscus idus	OECD 203			
fish:			0			(Fish, Acute			
						Toxicity Test)			
12.1. Toxicity to	NOEC/NOE	96h	>100	mg/l	Oncorhynchus	OECD 203			
fish:	L		0		mykiss	(Fish, Acute			
						Toxicity Test)			
12.1. Toxicity to	NOEC/NOE	48h	>100	mg/l	Daphnia	OECD 202			
daphnia:	L				magna	(Daphnia sp.			
						Acute			
						Immobilisatio			
					,	n Test)			
12.1. Toxicity to	EL50	48h	>100	mg/l	Daphnia	OECD 202			
daphnia:					magna	(Daphnia sp.			
						Acute			
						Immobilisatio			
						n Test)			



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2	·			4	30	3	
12.1. Toxicity to daphnia:	LC50	48h	>100	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisatio n Test)	
12.1. Toxicity to algae:	EL50	48h	>100 0	mg/l	Pseudokirchn eriella subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
12.2. Persistence and degradability:		28d	>60	%		OECD 301 B (Ready Biodegradabili ty - Co2 Evolution Test)	
12.3. Bioaccumulative potential:							Product floats on the water surface.
12.5. Results of PBT and vPvB assessment							No PBT substance, No vPvB substance
Toxicity to bacteria:	LC50		>100 0	mg/l	activated sludge		
Toxicity to bacteria:	NOELR		>100	mg/l	Pseudomonas subspicata		

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)

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.

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.

15 01 04 metallic packaging

15 01 10 packaging containing residues of or contaminated by hazardous substances



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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

14.5. Environmental hazards: Not applicable

Tunnel restriction code: D

Transport by sea (IMDG-code)

14.2. UN proper shipping name:

AFROSOLS

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 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.):









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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): 24,99 %

Observe incident regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

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
Skin Irrit. 2, H315	Classification according to calculation procedure.
STOT SE 3, H336	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.
Aerosol 1, H222	Classification based on test data.
Aerosol 1, H229	Classification based on test data.

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.



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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

 ${\sf Asp.\ Tox.-Aspiration\ hazard}$ Flam. Liq. — Flammable liquid

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Art.: 146700

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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)



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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

CESIOComité 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



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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

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 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



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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.