

according to Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU

Copper Spray

Version number: 3.0
Revision: 08.05.2017

Date of compilation: 11.06.2015

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

Product identifier

Trade name Copper Spray

Other means of identification

Article number

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

Relevant identified uses industrial use professional use

Sector of use Coating

Uses advised against consumer use (private households)

Do not use for products that are intended for contact

with food - exclude food contact.

Details of the supplier of the safety data sheet

WINKEL GmbH

Lisztstraße 1 53881 Euskirchen - Germany

Tel.: +49 2251 77 69 400-401 E-Mail: info@winkelgroup.de

Tel.: +49 2251 77 69 400-401

Fax: +49 2251 77 69 402 web: www.winkelgroup.de

E-Mail: info@winkelgroup.de

Further information obtainable from: 24 hours Emergency telephone number:

BfR Bundesinstitut für Risikobewertung: +49-30-18412-0

Ontario Poison Centre: +1 (800)-268-9017

Alberta Poison & Drug Information Service: +1 (800) 332-1414

Centre antipoison du Québec: +1 (800) 463-5060

American Association of Poison Control Centers: +1 (800) 222-1222

SECTION 2: Hazards identification

Classification of the substance or mixture

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

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.3	aerosols	Cat. 1	(Aerosol 1)	H222,H229
3.3	serious eye damage/eye irritation	Cat. 2	(Eye Irrit. 2)	H319
3.8D	specific target organ toxicity - single exposure (narcotic effects, drowsiness)	Cat. 3	(STOT SE 3)	H336
4.1C	hazardous to the aquatic environ- ment - chronic hazard	Cat. 3	(Aquatic Chronic 3)	H412

Remarks

For full text of H-phrases: see SECTION 16. **Supplemental hazard information**

EUH066 Repeated exposure may cause skin dryness or cracking.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

Label elements

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

Signal word Danger

Pictograms

GHS02, GHS07





Hazard statements

H222 Extremely flammable aerosol.

H229 Pressurized container: may burst if heated.

H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

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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.

P260 Do not breathe vapours/spray.

Use only outdoors or in a well-ventilated area. P271

P273 Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection. P280

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to P305+P351+P338

do. Continue rinsing.
Call a POISON CENTER/doctor if you feel unwell. P312 P337+P313 If eye irritation persists: Get medical advice/attention.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

Dispose of contents/container to hazardous or special waste.

Additional labelling requirements

EUH066 Repeated exposure may cause skin dryness or cracking.

Buildup of explosive mixtures possible without sufficient ventilation.

Hazardous ingredients for labelling:

ethyl acetate, Hydrocarbons, C9, aromatics

Other hazards

There is no additional information.

SECTION 3: Composition/information on ingeredients

Mixtures

Description of the mixture

Mixture of substances listed below with nonhazardous additions

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
Butane	CAS No 106-97-8	25 - < 50	Flam. Gas 1 / H220 Press. Gas L / H280	
	EC No 203-448-7			•
	REACH Reg. No 01-2119474691-32- xxxx			
Ethyl acetate	CAS No 141-78-6	25 - < 50	Flam. Liq. 2 / H225 Eye Irrit. 2 / H319 STOT SE 3 / H336	<u>(*)</u>
	EC No 205-500-4		3101 32 37 11330	~ ~
	REACH Reg. No 01-2119475103-46- xxxx			
Propane	CAS No 74-98-6	10 - < 25	Flam. Gas 1 / H220 Press. Gas L / H280	
	EC No 200-827-9			V V
	REACH Reg. No 01-2119486944-21- xxxx			
Hydrocarbons, C9, aromatics	EC No 918-668-5	5 - < 10	Flam. Liq. 3 / H226 STOT SE 3 / H336 Asp. Tox. 1 / H304	
	REACH Reg. No 01-2119455851-35- xxxx		Aquatic Acute 1 / H400 Aquatic Chronic 2 / H411	***

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Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC	Pictograms
Copper	CAS No 7440-50-8	1 - < 5	Aquatic Acute 1 / H400 Aquatic Chronic 3 / H412	1
	EC No 231-159-6			~
	REACH Reg. No 01-2119480154-42- xxxx			
Isobutane	CAS No 75-28-5	1 - < 5	Flam. Gas 1 / H220 Press. Gas L / H280	<u>(*)</u>
	EC No 200-857-2			~ ~
	REACH Reg. No 01-2119485395-27- xxxx			

For full text of abbreviations: see SECTION 16.

SECTION 4: First aid measures

Description of first aid measures

General notes

Do not leave affected person unattendedRemove victim out of the danger areaKeep affected person warm, still and covered. Take off immediately all contaminated clothingIn all cases of doubt, or when symptoms persist, seek medical advicen case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid action@rovide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing rigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Not applicable, as aerosol.

Most important symptoms and effects, both acute and delayed

Narcotic effects.

Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media

water spray, BC-powder

Unsuitable extinguishing media

water jet

Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

Advice for firefighters

Do not allow firefighting water to enter drains or water courses collect contaminated firefighting water separately Remove undamaged cans from the danger area. If necessary, cool by spraying with water because of bursting ear fully protective suit. Wear self-contained breathing apparatus.

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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

Environmental precautions

Keep away from drains, surface and ground waterRetain contaminated washing water and dispose of it.

Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

SECTION 7: Handling and storage

Precautions for safe handling

Recommendations

• Measures to prevent fire as well as aerosol and dust generation

Keep away from sources of ignition - No smokingTake precautionary measures against static dischargeUse only in well-ventilated areas. Prevent from heating up above 50 °C.

Advice on general occupational hygiene

Wash hands after use.Do not eat, drink and smoke in work areasRemove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

Conditions for safe storage, including any incompatibilities

Managing of associated risks

Storage class (LGK)

2B.

Flammability hazards

Do not spray on an open flame or other ignition source?rotect from sunlight.

Incompatible substances or mixtures

Separate storage required for storage class: 4.1 A, 4.1 B, 4.2, 4.3, 5.1 A, 5.1 B, 5.2, 6.2, 7.

Consideration of other advice

Packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

Specific end use(s)

No further relevant information available.

SECTION 8: Exposure controls/personal protection

Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Coun try	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m³]	STEL [ppm]	STEL [mg/m³]	Source
DE	Butane	106-97-8	AGW	1.000	2.400	4.000	9.600	TRGS 900
DE	Ethyl acetate	141-78-6	AGW	400	1.500	800	3.000	TRGS 900
DE	Propane	74-98-6	AGW	1.000	1.800	4.000	7.200	TRGS 900
DE	Copper	7440-50-8	MAK		0,01		0,02	DFG
DE	Isobutane	75-28-5	AGW	1.000	2.400	4.000	9.600	TRGS 900

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average

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Relevant DNELs/DMELs/PNECs and other threshold levels

• relevant DNELs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Protection goal, route of expos- ure	Used in	Exposure time
Hydrocarbons, C9, aromatics		DNEL	150 mg/m ³	Human, inhalatory	Worker (in- dustry)	Chronic - systemic effects
Hydrocarbons, C9, aromatics		DNEL	25 mg/kg bw/day	Human, dermal	Worker (in- dustry)	Chronic - systemic ef- fects
Copper	7440-50- 8	DNEL	20 mg/m ³	Human, inhalatory	Worker (in- dustry)	Acute - systemic ef- fects
Copper	7440-50- 8	DNEL	273 mg/kg bw/day	Human, dermal	Worker (in- dustry)	Acute - systemic ef- fects

• relevant PNECs of components of the mixture

Name of sub- stance	CAS No	End- point	Threshold level	Organism	Environ- mental com- partment	Exposure time
Ethyl acetate	141-78-6	PNEC	650 ^{mg} / _I	Microorganisms	Sewage treat- ment plant (STP)	Short-term (single instance)
Ethyl acetate	141-78-6	PNEC	1,65 ^{mg} / _I	Aquatic organisms	Water	Intermittent release
Copper	7440-50- 8	PNEC	7,8 ^{µg} / _I	Aquatic organisms	Freshwater	Short-term (single instance)
Copper	7440-50- 8	PNEC	230 ^{µg} / _I	Aquatic organisms	Sewage treat- ment plant (STP)	Short-term (single instance)

Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

By designated use no eye protection necessary. Do not spray in eyes.

Skin protection

By designated use no hand protection necessary.

· type of material

IIR: isobutene-isoprene (butyl) rubber

• other protection measures

Take recovery periods for skin regenerationPreventive skin protection (barrier creams/ointments) is recommendedWash hands thoroughly after handling.

Respiratory protection

By designated use no protection necessaryApply outdoors or well ventilated areas.

Environmental exposure controls

Use appropriate container to avoid environmental contamination.

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SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state aerosol (spray aerosol)

Colour copper
Odour solvent like

Other physical and chemical parameters

Initial boiling point and boiling range

Not applicable, as aerosol.*

Flash point

Not applicable, as aerosol.*

Evaporation rate Not determined
Flammability (solid, gas) Flammable aerosol in accordance with GHS criteria

Explosive limits

lower explosion limit (LEL)
 upper explosion limit (UEL)
 Vapour pressure
 3,8 bar at 20 °C

 $\begin{array}{cc} \text{6,8 bar at 50 °C} \\ \text{Density} & \text{0,7 } \text{9/}_{\text{cm}^3} \text{ at 20 °C} \\ \end{array}$

Water solubility insoluble

n-octanol/water (log KOW) this information is not available

Auto-ignition temperature 287 °C

Viscosity not relevant (aerosol)

Explosive properties none Oxidising properties none

Other information

Solvent content 87,1 %

SECTION 10: Stability and reactivity

Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materialsr"i.sk of ignition

Chemical stability

See below "Conditions to avoid".

Possibility of hazardous reactions

No known hazardous reactions.

Conditions to avoid

Do not spray on an open flame or other ignition source. K-eep away from heat.

Hints to prévent fire or explosion

Protect from sunlight.

Physical stresses which might result in a hazardous situation and have to be avoided

high temperatures

Incompatible materials

There is no additional information.

Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

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^{*} The finished mixture in an aerosol container is formed after addition of propellant. Several details are not measurable in an hermetic closed, pressurized container.



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SECTION 11: Toxicological information

Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)

• Specific target organ toxicity - single exposure

May cause drowsiness or dizziness.

• Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Other information

Repeated exposure may cause skin dryness or cracking.

SECTION 12: Ecological information

Toxicity

Harmful to aquatic life.

Water hazard class - WHC (Wassergefährdungsklasse) (WGKGermany): 2 (hazardous to water)

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Butane	106-97-8	LC50	28 ^{mg} / _I	Fish	96 h
Butane	106-97-8	EC50	7,71 ^{mg} / _l	Algae	96 h
Ethyl acetate	141-78-6	LC50	230 ^{mg} / _l	Fish	96 h
Propane	74-98-6	LC50	28 ^{mg} / _I	Fish	96 h
Propane	74-98-6	EC50	7,71 ^{mg} / _l	Algae	96 h
Hydrocarbons, C9, aromatics		LL50	9,2 ^{mg} / _l	Fish	96 h
Hydrocarbons, C9, aromatics		EL50	3,2 ^{mg} / _I	Aquatic inver- tebrates	48 h
Hydrocarbons, C9, aromatics		ErC50	0,42 ^{mg} / _l	Algae	72 h
Hydrocarbons, C9, aromatics		EC50	0,29 ^{mg} / _l	Algae	72 h
Copper	7440-50-8	LC50	193 ^{µg} / _I	Fish	96 h
Isobutane	75-28-5	LC50	28 ^{mg} / _I	Fish	96 h
Isobutane	75-28-5	EC50	7,71 ^{mg} / _I	Algae	96 h

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Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Ethyl acetate	141-78-6	EC50	2.306 ^{mg} / _I	Aquatic inver- tebrates	24 h
Hydrocarbons, C9, aromatics		EL50	4,1 ^{mg} / _I	Aquatic inver- tebrates	24 h
Hydrocarbons, C9, aromatics		EC50	>99 ^{mg} / _I	Microorganisms	10 min

Persistence and degradability

Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
Ethyl acetate	141-78-6	Oxygen depletion	62 %	5 d
Hydrocarbons, C9, aromatics		Oxygen depletion	30,9 %	2 d

Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Butane	106-97-8		1,09 (pH value: 7, 20 °C)	
Ethyl acetate	141-78-6	30	0,68 (pH value: 7, 25 °C)	
Propane	74-98-6		1,09 (pH value: 7, 20 °C)	
Isobutane	75-28-5		1,09 (pH value: 7, 20 °C)	

Mobility in soil

Data are not available.

Results of PBT and vPvB assessment

Data are not available.

Other adverse effects

Data are not available.

Endocrine disrupting potential

None of the ingredients are listed.

SECTION 13: Disposal considerations

Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be use@ompletely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Relevant provisions relating to waste

List of wastes

15 01 04 Metallic packaging

15 01 10 Packaging containing residues of or contaminated by dangerous substances

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

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Remarks

Please consider the relevant national or regional provisions Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

UN number 1950

UN proper shipping name AEROSOLS

Transport hazard class(es)

Class 2 (gases) (aerosol)
Subsidiary risk(s) 2.1 (flammability)

Packing group not assigned to a packing group

Environmental hazards none (non-environmentally hazardous acc. to the dangerous goods

regulations)

Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

• Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)

 UN number
 1950

 Proper shipping name
 AEROSOLS

 Class
 2

 Classification code
 5F

 Danger label(s)
 2.1



Special provisions (SP) 190, 327, 344, 625

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
Transport category (TC) 2
Tunnel restriction code (TRC) D

• International Maritime Dangerous Goods Code (IMDG)

UN number 1950
Proper shipping name AEROSOLS
Class 2.1
Danger label(s) 2.1



Special provisions (SP) 63, 190, 277, 327, 344, 959

Excepted quantities (EQ) E0
Limited quantities (LQ) 1 L
EmS F-D, S-U
Stowage category -

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• International Civil Aviation Organization (ICAO-IATA/DGR)

UN number 1950

Proper shipping name Aerosols, flammable

Class 2.1 Danger label(s) 2.1



Special provisions (SP) A145, A167 Excepted quantities (EQ) F0 30 kg Limited quantities (LQ)

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

• Restrictions according to REACH, Annex XVII

None of the ingredients are listed.

• List of substances subject to authorisation (REACH, Annex XIV)

None of the ingredients are listed.

• Directive 75/324/EEC relating to aerosol dispensers

Classification of the gas/aerosol Extremely flammable

Labelling Pressurized container: may burst if heated

Keep out of the reach of children

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

smoking Do not pierce or burn, even after use

Protect from sunlight. Do not expose to temperatures exceeding 50 °C

• Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)

VOC content 87,1 % 610 g/l

Product category	Product subcategory	Coating	VOC g/I
Vehicle refinishing products	Special finishes	All types	840

• Directive on industrial emissions (VOCs, 2010/75/EU)

VOC content 87,1 %

• Regulation 166/2006/EC concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

Name of substance	CAS No	Re- marks	Threshold for releases to air (kg/year)	Threshold for releases to water (kg/year)	Threshold for releases to land (kg/year)
Copper	7440-50-8	(8)	100	50	50

Legend

All metals shall be reported as the total mass of the element in all chemical forms present in the release

National regulations (Germany)

• Administrative Regulation on Substances Hazardous to Water (VwVwS)

Water hazard class - WHC (Wassergefährdungsklasse) 2 (hazardous to water) -classification acc. to annex 3/annex 4 (VwVwS)

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• Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass con- centration	Notation
5.2.2	Atomised inorganic substances	Class III	1 - < 5 wt%	5 ^g / _h	1 ^{mg} / _{m³}	Cu
5.2.5	Organic substances		≥ 25 wt%	0,5 ^{kg} /h	50 ^{mg} / _{m³}	3)

Notation

3) A total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall

not be exceeded (except organic particulate matter)

Cu Calculated as Cu (copper)

• Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK): 2 B (aerosol dispensers and lighters)

Chemical Safety Assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures ADN.

(European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways).

Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement ADR.

concerning the International Carriage of Dangerous Goods by Road).

AGW Workplace exposure limit.

Aquatic Acute. Hazardous to the aquatic environment - acute hazard. Aquatic Chronic. Hazardous to the aquatic environment - chronic hazard.

Asp. Tox. Aspiration hazard.

BCF Bioconcentration factor. BOD. Biochemical Oxygen Demand.

CAS. Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances).

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

CMR. Carcinogenic, Mutagenic or toxic for Reproduction.

COD. Chemical oxygen demand.

Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim. Dangerous Goods Regulations (see IATA/DGR). DFG.

DGR.

DMFI. Derived Minimal Effect Level.

Derived No-Effect Level DNEL.

The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of EC No.

substances commercially available within the EU (European Union). European Inventory of Existing Commercial Chemical Substances

EINECS. ELINCS. European List of Notified Chemical Substances.

EmS. Emergency Schedule.

Eye Dam. Seriously damaging to the eye

Irritant to the eye. Eve Irrit. Flammable gas. Flam. Gas. Flammable liquid. Flam. Liq.

"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations. GHS.

IATA. International Air Transport Association.

IATA/DGR. Dangerous Goods Regulations (DGR) for the air transport (IATA).

ICAO. International Civil Aviation Organization. International Maritime Dangerous Goods Code. IMDG.

Lagerklasse (storage class according to TRGS 510, Germany). LGK.

Log KOW. n-Octanol/water.

MARPOL International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant").

NLP. No-Longer Polymer.

PBT. Persistent, Bioaccumulative and Toxic PNEC. Predicted No-Effect Concentration.

Ppm. Parts per million. Press. Gas. Gas under pressure

Registration, Evaluation, Authorisation and Restriction of Chemicals. REACH.

RID. Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning

the International carriage of Dangerous goods by Rail). STEL. Short-term exposure limit.

STOT SE. Specific target organ toxicity - single exposure.

TRGS. Technische Regeln für GefahrStoffe (technical rules for hazardous substances, Germany)

TRGS 900. Arbeitsplatzgrenzwerte (TRGS 900) TWA. Time-weighted average.

VOC. Volatile Organic Compounds. VPvB. Very Persistent and very Bioaccumulative.

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Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU Regulation (EC) No. 1272/2008 (CLP, EU GHS)

Classification procedure

Physical and chemical properties:The classification is based on tested mixture.

Health hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

H220.	Extremely flammable gas.
H222.	Extremely flammable aerosol.
H225.	Highly flammable liquid and vapour.
H226.	Flammable liquid and vapour.
H229.	Pressurized container: may burst if heated.
H280.	Contains gas under pressure; may explode if heated.
H304.	May be fatal if swallowed and enters airways.
H319.	Causes serious eye irritation.
H336.	May cause drowsiness or dizziness.
H400.	Very toxic to aquatic life.
H411.	Toxic to aquatic life with long lasting effects.
H412.	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledgeT.his SDS has been compiled and is solely intended for this product.

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