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

Revised on / Version: 25.06.2012 / 0003 Replaces revision of / Version: 19.01.2011 / 0002

Valid from: 25.06.2012 PDF print date: 18.07.2012 Kupfer-Paste 100gr Art.: 3080

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

Kupfer-Paste 100gr

Art.: 3080

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

Lubricant

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

LIQUI MOLY GmbH, Jerg-Wieland-Straße 4, D-89081 Ulm-Lehr Telephone (+49) 0731-1420-0, Fax (+49) 0731-1420-88

E-mail address of the competent person: info@chemical-check.de, k.schnurbusch@chemical-check.de

1.4 Emergency telephone

Advisory office in case of poisoning:

Telephone number of the company in case of emergencies:

Tel.: (+49) 0731-1420-0

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Not determined

2.1.2 Classification according to Directives 67/548/EEC and 1999/45/EC (including amendments)

Dangerous for the environment, R52-53

2.2 Label elements

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

Not determined

2.2.2 Labeling according to Directives 67/548/EEC and 1999/45/EC (including amendments)

Symbols: Not applicable Indications of danger: ---

R-phrases:

52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

S-phrases:

56 Dispose of this material and its container to hazardous or special waste collection point.

Additions: Contains

Di-iso-octyl amino methyl tolutriazole May produce an allergic reaction.

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.

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

May produce an allergic reaction.

SECTION 3: Composition/information on ingredients

3.1 Substance

n.a. 3.2 Mixture

OIE MIXEUIO	
2,6-Di-t-butyl-4-methyl-phenol	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	204-881-4
CAS	CAS 128-37-0
content %	0,25-<2,5
Classification according to Directive 67/548/EEC	Dangerous for the environment, N, R50
	Dangerous for the environment
Classification according to Regulation (EC) 1272/2008 (CLP)	Aquatic Acute 1, H400
	Aquatic Chronic 1, H410

B:: (1 : (1 14 14: 1	
Di-iso-octyl amino methyl tolutriazole	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	279-503-4 + 279-514-4
CAS	CAS 80584-90-3 + 80595-74-0
content %	0,1-<1
Classification according to Directive 67/548/EEC	Irritant, Xi, R38
	Sensitizing, R43
	Dangerous for the environment, N, R51
	Dangerous for the environment, R53
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Irrit. 2, H315
	Skin Sens. 1, H317
	Aguatic Chronic 2. H411

For the text of the R-phrases / H-phrases and classification codes (GHS/CLP), see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Normally not necessary.

Supply person with fresh air and consult doctor according to symptoms.

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.

Keep Data Sheet available.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed

Drying of the skin.

With long-term contact:

Irritation of the skin.



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Sensitive individuals: Allergic reaction possible.

4.3 Indication of any immediate medical attention and special treatment needed

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

Foam

Dry extinguisher

Sand **Unsuitable extinguishing media**

Water

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop:

Oxides of carbon

Oxides of nitrogen

Oxides of phosphorus

Toxic gases

5.3 Advice for firefighters

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

Protective respirator with independent air supply.

Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure sufficient supply of air.

Avoid inhalation, and contact with eyes or skin.

If applicable, caution - risk of slipping

Do not carry cleaning cloths soaked in product in trouser pockets.

6.2 Environmental precautions

If leakage occurs, dam up.

Prevent from entering drainage system.

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

6.3 Methods and material for containment and cleaning up

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

Pick up mechanically 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

Keep away from sources of ignition - Do not smoke.

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. Protect against moisture and store closed. Store cool

7.3 Specific end use(s)

No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

GB Chemic	al Name	2,6-Di-t-butyl-4-met	thyl-phenol				Content %:0,25-
Citolinio		2,0 21 (201)1 1 1110	ary priorior				<2,5
WEL-TWA:	10 mg/m3		WEL-STEL:				
BMGV:					Other information:	•	
Chemic	al Name	Copper					Content %:
			WEL-STEL:	2 mg/m3 (dusts ar	ad mists, as Cu)		Goritoni 70.
	1 mg/m3 (dusts and m	isis, as Cu)	WEL-SIEL.	Z mg/ms (dusts ar	· , ,		
BMGV:					Other information:		
© Chemic	al Name	Silica, amorphous					Content %:
WEL-TWA:	6 mg/m3 (total inh. dus	st), 2,4 mg/m3	WEL-STEL:				
(resp. dust)	J (,, , 0					
BMGV:					Other information:		
Chemic	al Name	2,6-Di-t-butyl-4-met	thyl-phenol				Content %:
WEL-TWA:	10 mg/m3		WEL-STEL:				
BMGV:	-				Other information:		
© Chemic		Oil mist, mineral					Content %:
WEL-TWA:	5 mg/m3 (ACGIH)		WEL-STEL:	10 mg/m3 (ACGIF			
BMGV:					Other information:		

^{** =} The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.

Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
	Environmental					
	compartment					
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5,8	mg/m3	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,74	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,3	mg/kg bw/day	
Consumer	Human - dermal	Long term, systemic effects	DNEL	5	mg/kg bw/d	
	Environment - soil		PNEC	1,04	mg/kg wwt	
	Environment - sewage treatment plant		PNEC	100	mg/l	
	Environment - sediment		PNEC	1,29	mg/kg wwt	
	Environment - marine		PNEC	0,4	μg/l	
	Environment - periodic release		PNEC	4	μg/l	
	Environment - freshwater		PNEC	4	μg/l	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.



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8.2 Exposure controls

8.2.1 Appropriate engineering controls

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

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

Applies only if maximum permissible exposure values are listed here.

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: If applicable

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

Skin protection - Hand protection: Recommended

Protective nitrile gloves (EN 374) Minimum layer thickness in mm:

Permeation time (penetration time) in minutes:

> 120

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

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.

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: Pastelike, Liquid Colour: Copper Odour: Characteristic Odour threshold: Not determined pH-value: Not determined Melting point/freezing point: 180 °C (Drop point)

Initial boiling point and boiling range: Not determined Flash point: >100 °C Evaporation rate: Not determined Flammability (solid, gas): Not determined Lower explosive limit: Not determined Upper explosive limit: Not determined Vapour pressure: Not determined



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Vapour density (air = 1):

Density:

Density:

Solubility(ies):

Water solubility:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Not determined

Not determined

Not determined

Decomposition temperature:

Viscosity:

Explosive properties:

Oxidising properties:

Not determined

Not determined

Not determined

9.2 Other information

Miscibility:

Fat solubility / solvent:

Conductivity:

Not determined

Not determined

Surface tension:

Not determined

Not determined

Not determined

Not determined

Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No decomposition if used as intended.

10.4 Conditions to avoid

See also section 7.

Protect from humidity.

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

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

Kupfer-Paste 100gr Art.: 3080			,	,		
Toxicity/effect	Endpoin t	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						n.d.a.
sensitisation:						
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 -						n.d.a.
repeated exposure (STOT-RE):						
Aspiration hazard:						n.d.a.
Respiratory tract irritation:						n.d.a.
Repeated dose toxicity:						n.d.a.
Symptoms:						n.d.a.



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Other information:			Classification according
			to calculation procedure.

Toxicity/effect	Endpoin t	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)	
Skin corrosion/irritation:						Slightly irritant
Serious eye damage/irritation:				Rabbit	(Draize-Test)	Slightly irritant
Respiratory or skin sensitisation:				Human being		Not sensitizising
Germ cell mutagenicity:					OECD 471 (Bacterial	No
3 ,					Reverse Mutation Test)	
Reproductive toxicity:	NOAEL	100	mg/kg	Rat		
Symptoms:						mucous membrane
						irritation

Di-iso-octyl amino methyl tolutriazole								
Toxicity/effect	Endpoin	Value	Unit	Organism	Test method	Notes		
	t							
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat				
Skin corrosion/irritation:				Rabbit		Irritant		
Serious eye damage/irritation:				Rabbit		Not irritant		
Respiratory or skin				Guinea pig	OECD 406 (Skin	Sensitizising		
sensitisation:					Sensitisation)			
Germ cell mutagenicity (in vitro):					OECD 471 (Bacterial	Negative		
					Reverse Mutation Test)			

Copper						
Toxicity/effect	Endpoin	Value	Unit	Organism	Test method	Notes
	t					
Symptoms:						abdominal pain, vomiting,
						weight loss, headaches,
						metal fume fever

2,6-Di-t-butyl-4-methyl-phenol								
Toxicity/effect	Endpoin	Value	Unit	Organism	Test method	Notes		
	t							
Acute toxicity, by oral route:	LD50	> 2000	mg/kg	Rat				
Symptoms:						mucous membrane		
						irritation		

SECTION 12: Ecological information

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

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	•						n.d.a.
Toxicity to daphnia:							n.d.a.
Toxicity to algae:							n.d.a.
Persistence and							Isolate as much as
degradability:							possible with an oil
							separator.
Bioaccumulative							n.d.a.
potential:							
Mobility in soil:							n.d.a.
Results of PBT and							n.d.a.
vPvB assessment							
Other adverse effects:							n.d.a.



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Other information:			According to the recipe,
			contains no AOX.

Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	>=0,57	mg/l	(Brachydanio rerio)		
Toxicity to daphnia:	NOEC/NO EL	21d	0,316	mg/l	(Daphnia magna)	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to daphnia:	EC50	48h	0,61		(Daphnia magna)	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
Toxicity to algae:	IC50	72h	>0,4	mg/l	(Desmodesmus subspicatus)	84/449/EEC C.3	
Persistence and degradability:		28d	4,5	%		OECD 301 C (Ready Biodegradability - Modified MITI Test (I))	
Bioaccumulative potential:	Log Pow		5,10			.,,	
Results of PBT and vPvB assessment							No PBT substance
Toxicity to bacteria:	EC50	3h	>1000 0	mg/l	(activated sludge)		
Other information:							Contains organically bound halogens, which may contribute to the AOX value in wastewate
Water solubility:			0,0007	g/l			

Di-iso-octyl amino methyl tolutriazole							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC50	96h	1,3	mg/l	(Brachydanio rerio)	OECD 203	
						(Fish, Acute	
						Toxicity Test)	
Toxicity to daphnia:	EC50	24h	1,4	mg/l	(Daphnia magna)	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
						Test)	
Persistence and		28d	7-11	%		OECD 301 B	Not readily biodegradable
degradability:						(Ready	
						Biodegradability -	
						Co2 Evolution	
						Test)	
Persistence and		28d	58-61	%		OECD 302 B	Not readily biodegradable
degradability:						(Inherent	
						Biodegradability -	
						Zahn-	
						Wellens/EMPA	
						Test)	



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Toxicity to bacteria:	IC50	3h	69	mg/l	(activated sludge)	OECD 209
				_		(Activated
						Sludge,
						Respiration
						Inhibition Test
						(Carbon and
						Ammonium
						Oxidation))
Water solubility:			<0,01	%		

2,6-Di-t-butyl-4-methyl-phenol							
Toxicity/effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
Toxicity to fish:	LC0	96h	> 0,5	mg/l	(Brachydanio rerio)		
Toxicity to daphnia:	EC0	48h	> 0,3	mg/l	(Daphnia magna)		
Toxicity to daphnia:	NOEC/NO EL	21d	0,14	mg/l	(Daphnia magna)		
Toxicity to algae:	EC50	72h	>0,4	mg/l	(Desmodesmus subspicatus)		
Persistence and degradability:		14d	30	%			

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. (2001/118/EC, 2001/119/EC, 2001/573/EC)

07 06 99 wastes not otherwise specified

 $20\ 01\ 26$ oil and fat other than those mentioned in $20\ 04\ 25$

Recommendation:

Pay attention to local and national official regulations

E.g. dispose at suitable refuse site.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations

Empty container completely.

Uncontaminated packaging can be recycled.

Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements

UN number: n.a.

Transport by road/by rail (ADR/RID)

UN proper shipping name: Transport hazard class(es):

Transport hazard class(es):

Packing group:

Classification code:

LQ (ADR 2011):

n.a.

LQ (ADR 2009):

n.a.

Environmental hazards: Not applicable

Tunnel restriction code:

Transport by sea (IMDG-code)

UN proper shipping name:

Transport hazard class(es):

Packing group:

Marine Pollutant:

n.a.

n.a.

Environmental hazards: Not applicable



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Transport by air (IATA)

UN proper shipping name:

Transport hazard class(es):

Packing group:

n.a.

n.a.

Environmental hazards: Not applicable

Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Non-dangerous material according to Transport Regulations.

SECTION 15: Regulatory information

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

Yes

For classification and labelling see Section 2.

Observe restrictions:

Comply with trade association/occupational health regulations.

VOC 1999/13/EC: 0%

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

These details refer to the product as it is delivered.

Revised sections: 2, 3, 8, 11, 12, 16

The following statements are the indicated R-phrases / H-phrases and classification codes (GHS/CLP) for the ingredients (listed in Section 3).

43 May cause sensitization by skin contact.

50 Very toxic to aquatic organisms.

51 Toxic to aquatic organisms.

52 Harmful to aquatic organisms.

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

38 Irritating to skin.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

H411 Toxic to aquatic life with long lasting effects.

Aquatic Acute-Hazardous to the aquatic environment - acute

Aquatic Chronic-Hazardous to the aquatic environment - chronic

Skin Irrit.-Skin irritation

Skin Sens.-Skin sensitization

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)



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BMGV Biological monitoring guidance value (EH40, UK)

BOD Biochemical oxygen demand

BSEF Bromine Science and Environmental Forum

bw body weight

CAS Chemical Abstracts Service

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

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

NOAECNo Observed Adverse Effective Concentration

NOAEL No Observed Adverse Effect Level



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

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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

REACHRegistration, 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)
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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