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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

PAG Klimaanlagenoel 100 R-1234 YF 250 ml Art.: 20736

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

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

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LIQUI MOLY GmbH, Jerg-Wieland-Str. 4, 89081 Ulm-Lehr, Germany Phone:(+49) 0731-1420-0, Fax:(+49) 0731-1420-88

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:

Telephone number of the company in case of emergencies: +49 (0) 700 / 24 112 112 (LMR)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixtureClassification according to Regulation (EC) 1272/2008 (CLP)Hazard classHazard categoryHazard statementSkin Sens.1H317-May cause aAquatic Chronic3H412-Harmful to act

H317-May cause an allergic skin reaction. H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements Labeling according to Regulation (EC) 1272/2008 (CLP)





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H317-May cause an allergic skin reaction. H412-Harmful to aquatic life with long lasting effects.

P101-If medical advice is needed, have product container or label at hand. P102-Keep out of reach of children. P261-Avoid breathing vapours or spray. P280-Wear protective gloves. P333+P313-If skin irritation or rash occurs: Get medical advice / attention. P501-Dispose of contents / container to special waste collection point.

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether

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

3.1 Substance

n.a. 3.2 Mixture

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	221-453-2
CAS	3101-60-8
content %	1-2,5
Classification according to Regulation (EC) 1272/2008 (CLP)	Skin Sens. 1, H317
	Aquatic Chronic 2, H411
2 6-di-tert-butyl-p-cresol	

204-881-4
128-37-0
<1
Aquatic Acute 1, H400 (M=1)
Aquatic Chronic 1, H410 (M=1)

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 3.1/3.2 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

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.

Ingestion



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Rinse the mouth thoroughly with water.

Give copious water to drink - 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.

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Adapt to the nature and extent of fire.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon Toxic gases

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Protective respirator with independent air supply. Full protection, if necessary. 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 contact with eyes or skin. If applicable, caution - risk of slipping.

6.2 Environmental precautions

If leakage occurs, dam up. Resolve leaks if this possible without risk. Prevent from entering drainage system. 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

Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) 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 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.



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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. Store at room temperature.

7.3 Specific end use(s)

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No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Chemical Name	2,6-di-tert-butyl-p-cresol		Content %:<1
WEL-TWA: 10 mg/m3	WEL-STEL:	-	
Monitoring procedures:			
BMGV:		Other information:	

B 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.

2,6-di-tert-butyl-p-cresol Area of application	Exposure route /	Effect on health	Descriptor	Value	Unit	Note
Alea of application	Environmental	Encot on neutri	Descriptor	Value	- Onit	11010
	compartment					
	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	
	Environment - oral (animal feed)		PNEC	16,7	mg/kg	
	Environment - soil		PNEC	1,23	mg/kg	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	1,74	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	5	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	5,8	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	8,3	mg/kg bw/day	

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.

Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.



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These are specified by e.g. EN 14042. 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: Protective goggles (EN 166)

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Skin protection - Hand protection: Protective nitrile gloves (EN 374) Protective Neoprene® / polychloroprene gloves (EN 374). Protective PVC gloves (EN 374) Minimum layer thickness in mm: >= 0,13 Permeation time (penetration time) in minutes: >= 60

The breakthrough times determined in accordance with EN 374 Part 3 were not obtained under practical conditions. The recommended maximum wearing time is 50% of breakthrough time. Protective hand cream recommended.

Skin protection - Other: Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection: Normally not necessary.

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

Colour: Odour: Odour threshold: pH-value: Melting point/freezing point: Initial boiling point and boiling range: Flash point: Evaporation rate: Flammability (solid, gas): Lower explosive limit: Upper explosive limit: Vapour pressure:	Characteristic Not determined Not determined Not determined >230 °C Not determined n.a. Not determined Not determined Not determined
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Vapour density (air = 1): Density: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water): Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties: Oxidising properties:

9.2 Other information

Miscibility: Fat solubility / solvent: Conductivity: Surface tension: Solvents content:

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Not determined 0,9895 g/cm3 (20°C) n.a. Not determined Insoluble Not determined Not determined Not determined 100 mm2/s Product is not explosive. No

Not determined Not determined Not determined Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

Not to be expected **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.

None known 10.5 Incompatible materials

None known

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).

PAG Klimaanlagenoel 100 R-1234 YF 250 ml Art.: 20736 Toxicity / effect Endpoint 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 n.d.a. single exposure (STOT-SE): Specific target organ toxicity n.d.a. repeated exposure (STOT-RE): Aspiration hazard: n.d.a. Symptoms: n.d.a. p-tert-butylphenyl 1-(2,3-epoxy)propyl ether



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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat	OECD 425 (Acute Oral	
					Toxicity - Up-and-Down	
					Procedure)	
Acute toxicity, by dermal route:	LD50	>2000	mg/kg	Rat	OECD 402 (Acute	
					Dermal Toxicity)	

2,6-di-tert-butyl-p-cresol	En de sin (Malua	11	0	To all months all	Netes
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 oral route:	LD50	>2930	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	>2000	mg/kg	Rat	OECD 402 (Acute	
					Dermal Toxicity)	
Skin corrosion/irritation:						Slightly irritant
Serious eye damage/irritation:				Rabbit	(Draize-Test)	Slightly irritant
Respiratory or skin				Human being		Not sensitizising
sensitisation:				-		-
Germ cell mutagenicity:					(Ames-Test)	Negative
Germ cell mutagenicity:				Mammalian		Negative
Reproductive toxicity:	NOAEL	100	mg/kg	Rat		
Specific target organ toxicity -	NOEL	25	mg/kg	Rat		(28 d)
repeated exposure (STOT-RE):						
Symptoms:						mucous
						membrane
						irritation
Specific target organ toxicity -	NOAEL	25	mg/kg	Rat		
repeated exposure (STOT-RE),						
oral:						

SECTION 12: Ecological information

PAG Klimaanlagenoel 100 R-1234 YF 250 ml							
Art.: 20736							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	-						n.d.a.
12.1. Toxicity to daphnia:							n.d.a.
12.1. Toxicity to algae:							n.d.a.
12.2. Persistence and							n.d.a.
degradability:							
12.3. Bioaccumulative							n.d.a.
potential:							
12.4. Mobility in soil:							n.d.a.
12.5. Results of PBT							n.d.a.
and vPvB assessment							
12.6. Other adverse							n.d.a.
effects:							

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	7,5	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to daphnia:	EC50	48h	67,9	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	



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12.1. Toxicity to algae:	EC50	72h	9	mg/l	Pseudokirchneriell	OECD 201 (Alga,
				-	a subcapitata	Growth Inhibition
						Test)

Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	>0,57	mg/l		QSAR	
12.1. Toxicity to fish:	NOEC/NOEL	42d	0,053	mg/l	Oryzias latipes	OECD 210 (Fish,	
-				_		Early-Life Stage	
						Toxicity Test)	
12.1. Toxicity to daphnia:	LC50	48h	0,61	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp.	
						Acute	
						Immobilisation	
10.4 Tavisituta dan baisu		01-1	0.07		Denkaismen	Test)	
12.1. Toxicity to daphnia:	NOEC/NOEL	21d	0,07	mg/l	Daphnia magna	OECD 202	
						(Daphnia sp. Acute	
						Immobilisation	
						Test)	
12.1. Toxicity to algae:	EC50	72h	0,5	mg/l	Desmodesmus	OECD 201 (Alga,	
12.1. Toxicity to algae.	2000	1211	0,0	iiig/i	subspicatus	Growth Inhibition	
					ousopioutuo	Test)	
12.1. Toxicity to algae:	NOEC/NOEL	72h	1	mg/l		OECD 201 (Alga,	
, , , , , , , , , , , , , , , , , , , ,				5		Growth Inhibition	
						Test)	
12.2. Persistence and		28d	4,5	%		OECD 301 C	Not readily
degradability:						(Ready	biodegradable
						Biodegradability -	
						Modified MITI	
						Test (I))	
12.3. Bioaccumulative			230-		Cyprinus caprio	OECD 305	56d
potential:			2500			(Bioconcentration -	
						Flow-Through	
	DOF					Fish Test)	
12.3. Bioaccumulative potential:	BCF		330- 1800				
12.3. Bioaccumulative	Log Pow		5,1				
potential:	LUGFUW		5,1				
12.3. Bioaccumulative	Log Pow		5,1				High
potential:	2091 011		0,1				i ngin
12.5. Results of PBT							No PBT
and vPvB assessment							substance
Toxicity to bacteria:	EC50	3h	>10000	mg/l	activated sludge		
Other information:							Does not contai
							any organically
							bound halogens
							which can
							contribute to the
							AOX value in
							waste water.
Other information:							Does not contai
							any organically
							bound halogens which can
							contribute to the
							AOX value in
							waste water.
Water solubility:			0,00076	g/l			Muoto Mutor.
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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) 13 02 06 synthetic engine, gear and lubricating oils Recommendation: Sewage disposal shall be discouraged. 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	
14.1. UN number:	n.a.
Transport by road/by rail (ADR/RID)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Classification code:	n.a.
LQ:	n.a.
14.5. Environmental hazards:	Not applicable
Tunnel restriction code:	
Transport by sea (IMDG-code)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
Marine Pollutant:	n.a
14.5. Environmental hazards:	Not applicable
Transport by air (IATA)	
14.2. UN proper shipping name:	
14.3. Transport hazard class(es):	n.a.
14.4. Packing group:	n.a.
14.5. Environmental hazards:	Not applicable
14.6. Special precautions for user	

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

14.7. Transport in bulk according to Annex II of MARPOL 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

Observe restrictions:

Comply with national regulations/laws governing maternity protection and the protection of young people at work! Comply with trade association/occupational health regulations.

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information



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Revised sections: 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):

2, 4, 5, 6, 7, 9, 10, 13, 14, 15

Classification in accordance with regulation (EC) No. 1272/2008 (CLP)	Evaluation method used
Skin Sens. 1, H317	Classification according to calculation procedure.
Aquatic Chronic 3, H412	Classification according to calculation procedure.

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).

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.

Skin Sens. — Skin sensitization Aquatic Chronic — Hazardous to the aquatic environment - chronic 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		
DTSU Dwell Time - 50% reduction of start concentration		



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		Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes)	
		dry weight	
		for example (abbreviation of Latin 'exempli gratia'), for instance	
		European Community	
	ECHA	European Chemicals Agency	
	EEA	European Economic Area	
	EEC	European Economic Community	
	EINECS	S European Inventory of Existing Commercial Chemical Substances	
	ELINCS		
	EN	European Norms	
	EPA	United States Environmental Protection Agency (United States of America)	
		Environmental Release Categories	
		Exposure scenario	
		et cetera	
		European Union	
		European Waste Catalogue	
		Fax number	
		general	
	0	Globally Harmonized System of Classification and Labelling of Chemicals	
		Global warming potential	
	HET-CA		
		Halocarbon Global Warming Potential	
		International Agency for Research on Cancer	
		International Air Transport Association	
	IBC	Intermediate Bulk Container	
	IBC (Co		
		Inhibitory concentration	
	IMDG-c	5	
		including, inclusive	
		International Uniform ChemicaL Information Database	
	LC	lethal concentration	
		lethal concentration 50 percent kill	
		lowest published lethal concentration	
		Lethal Dose of a chemical	
		Lethal Dose, 50% kill	
		Lethal Dose Low	
		Lowest Observed Adverse Effect Level	
		Lowest Observed Effect Concentration	
		Lowest Observed Effect Level	
	LQ	Limited Quantities	
	MARPC	DL 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	CNo Observed Adverse Effective Concentration	
	NOAEL	No Observed Adverse Effect Level	
	NOEC	No Observed Effect Concentration	
	NOEL	No Observed Effect Level	
	ODP	Ozone Depletion Potential	
		Organisation for Economic Co-operation and Development	
		organic	
		polycyclic aromatic hydrocarbon	
		persistent, bioaccumulative and toxic	
		Chemical product category	
	PE	Polyethylene	
		Predicted No Effect Concentration	
		Photochemical ozone creation potential	
		parts per million	
		Process category	
		Polytetrafluorethylene	
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Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 23.06.2017 / 0002 Replacing version dated / version: 01.12.2016 / 0001 Valid from: 23.06.2017 PDF print date: 23.06.2017 PAG Klimaanlagenoel 100 R-1234 YF 250 ml Art.: 20736 REACHRegistration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals) 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List REACH-IT List-No. 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 Structure Activity Relationship SAR SU Sector of use SVHC Substances of Very High Concern Tel. Telephone ThOD Theoretical oxygen demand Total organic carbon TOC 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

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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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