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

Revision date / version: 22.02.2019 / 0022

Replacing version dated / version: 09.07.2018 / 0021

Valid from: 22.02.2019 PDF print date: 09.03.2019 Octane Plus 150 mL

Art.: 8351

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

1.1 Product identifier

Octane Plus 150 mL

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

Additives

Uses advised against:

No information available at present.

1.3 Details of the supplier of the safety data sheet

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 mixture

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

Hazard class	Hazard category	Hazard statement
Acute Tox.	4	H332-Harmful if inhaled.

Asp. Tox. H304-May be fatal if swallowed and enters airways.

Carc. 2 H351-Suspected of causing cancer.

Aquatic Chronic 3 H412-Harmful to aquatic life with long lasting effects.

2.2 Label elements

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



Danger



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H332-Harmful if inhaled. H304-May be fatal if swallowed and enters airways. H351-Suspected of causing cancer. 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.

P260-Do not breathe vapours or spray. P271-Use only outdoors or in a well-ventilated area. P280-Wear protective gloves / protective clothing and eye protection / face protection.

P301+P310+P331-IF SWALLOWED: Immediately call a POISON CENTER / doctor. Do NOT induce vomiting. P308+P313-IF exposed or concerned: Get medical advice / attention.

P405-Store locked up.

P501-Dispose of contents / container to an approved waste disposal facility.

EUH066-Repeated exposure may cause skin dryness or cracking.

Tricarbonyl(methylcyclopentadienyl)manganese

Fuels, jet aircraft, coal solvent extn., hydrocracked hydrogenated

1,2,4-trimethylbenzene

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0.1 %).

The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).

SECTION 3: Composition/information on ingredients

3.1 Substance

3.2 Mixture

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics	
Registration number (REACH)	01-2119457273-39-XXXX
Index	
EINECS, ELINCS, NLP	918-481-9 (REACH-IT List-No.)
CAS	
content %	80-<100
Classification according to Regulation (EC) 1272/2008 (CLP)	Asp. Tox. 1, H304

Tricarbonyl(methylcyclopentadienyl)manganese	
Registration number (REACH)	
Index	
EINECS, ELINCS, NLP	235-166-5
CAS	12108-13-3
content %	3-<7
Classification according to Regulation (EC) 1272/2008 (CLP)	Acute Tox. 2, H330
	Acute Tox. 3, H301
	Aquatic Acute 1, H400 (M=1)
	Acute Tox. 2, H310

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Classification according to Regulation (EC) 1272/2008 (CLP)	Carc. 2, H351 Flam. Lig. 3, H226
	STOT SE 3, H335
	Aquatic Chronic 2, H411 Asp. Tox. 1, H304
	STOT SE 3, H336

1,2,4-trimethylbenzene	Substance for which an EU exposure limit value applies.
Registration number (REACH)	
Index	601-043-00-3
EINECS, ELINCS, NLP	202-436-9
CAS	95-63-6
content %	1-<2,5
Classification according to Regulation (EC) 1272/2008 (CLP)	Flam. Liq. 3, H226
	Acute Tox. 4, H332
	Eye Irrit. 2, H319
	STOT SE 3, H335
	Skin Irrit. 2, H315
	Aquatic Chronic 2, H411

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

The substances named in this section are given with their actual, appropriate classification!

For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

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

Quote: "Note P - The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 %

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

SECTION 4: First aid measures

4.1 Description of first aid measures

First-aiders should ensure they are protected!

w/w benzene (EINECS No 200-753-7).

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.

Respiratory arrest - Artificial respiration apparatus necessary.

Skin contact

Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap. Call a doctor immediately, keep datasheet at hand

Eye contact

Remove contact lenses.

Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

Ingestion

Rinse the mouth thoroughly with water.

Do not induce vomiting.

Give water to drink.

Consult doctor immediately - keep Data Sheet available.

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.

The following may occur:

Irritation of the eyes

Product removes fat.

Dermatitis (skin inflammation)

Ingestion:

Danger of aspiration

Lung damage Inhalation:

headaches



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irritation of the respiratory tract

nausea Dizziness

Other dangerous properties cannot be ruled out.

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

4.3 Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media

CO₂

Extinction powder

Foam

Water jet spray

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

Manganese oxides

Toxic gases

Flammable vapour/air mixtures

5.3 Advice for firefighters

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

Protective respirator with independent air supply.

Full protection

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.

If air supply is not sufficient, wear protective breathing apparatus.

Avoid inhalation, and contact with eyes or skin.

6.2 Environmental precautions

If leakage occurs, dam up.

Resolve leaks if this possible without risk.

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

Prevent penetration into drains, cellars, working pits or other places in which accumulation could be hazardous.

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) 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.

Suction measures at the workplace or on the processing machines required.

Keep away from sources of ignition - Do not smoke.



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Take measures against electrostatic charging, if appropriate.

Handle and open container with care.

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.

Suction measures at the workplace or on the processing machines required.

7.1.2 Notes on general hygiene measures at the workplace

General hygiene measures for the handling of chemicals are applicable.

Wash hands before breaks and at end of work.

Keep away from food, drink and animal feedingstuffs.

Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities

Keep out of access to unauthorised individuals.

Store product closed and only in original packing.

Not to be stored in gangways or stair wells.

Observe special storage conditions.

Solvent resistant floor

Do not store with oxidizing agents.

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

1,2,4-trimethylbenzene

Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40): 800 mg/m3

					0
Chemical Name	Hydrocarbons, C10	0-C13, n-alkanes, isoalkanes, cy	clics, <2% aromatics		Content %:80- <100
WEL-TWA: 800 mg/m3		WEL-STEL:			<100
Monitoring procedures:	- [Draeger - Hydrocarbons 2/a (81	03 581)	<u> </u>	
31		Oraeger - Hydrocarbons 0,1%/c			
		Compur - KITA-187 S (551 174)	,		
BMGV:		(00000)		(WFL acc.	to RCP-method,
J			EH40)	(a	,
Chemical Name	Fuels, jet aircraft, o	coal solvent extn., hydrocracked	hydrogenated		Content %:1-<2,5
WEL-TWA: 1200 mg/m3 (>=C7 nc	ormal and branched	WEL-STEL:			
chain alkanes)					
Monitoring procedures:	- [Draeger - Hydrocarbons 2/a (81	03 581)		
	- [Oraeger - Hydrocarbons 0,1%/c	(81 03 571)		
		Compur - KITA-187 S (551 174)			
BMGV:			Other information:		
Chemical Name	1,2,4-trimethylbenz	zene			Content %:1-<2,5
WEL-TWA: 25 ppm (125 mg/m3)	•	WEL-STEL:			
(Trimethylbenzenes, all isomers or r	nixtures) (WEL), 20				
ppm (100 mg/m3) (EU)					
Monitoring procedures:	- (Compur - KITA-111 U(C) (549 1	78)	'	
	N	MTA/MA-030/A92 (Determination	n of aromatic hydrocarbo	ns (benzen	e, toluene,
		ethylbenzene, p-xylene, 1,2,4-tri			
		chromatography) - 1992 - EU pro			
BMGV:		<u> </u>	Other information:		` /



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Area of application	Exposure route / Environmental	Effect on health	Descriptor	Value	Unit	Note
	compartment Environment - freshwater		PNEC	0.12	m a /l	
			PNEC	-,	mg/l	
	Environment - marine	_	PNEC	0,12	mg/l	
	Environment - sewage treatment plant			2,41	mg/l	
	Environment - sediment, freshwater		PNEC	13,56	mg/kg dry weight	
	Environment - sediment, marine		PNEC	13,56	mg/kg dry weight	
	Environment - soil		PNEC	2,34	mg/kg dry weight	
Consumer	Human - inhalation	Short term, local effects	DNEL	29,4	mg/m3	
Consumer	Human - inhalation	Short term, systemic effects	DNEL	29,4	mg/m3	
Consumer	Human - inhalation	Long term, local effects	DNEL	29,4	mg/m3	
Consumer	Human - dermal	Long term, systemic effects	DNEL	9512	mg/kg bw/day	
Consumer	Human - inhalation	Long term, systemic effects	DNEL	29,4	mg/m3	
Consumer	Human - oral	Long term, systemic effects	DNEL	15	mg/kg bw/d	
Consumer	Human - inhalation	Long term, local effects	DNEL	29,4	mg/m3	
Workers / employees	Human - inhalation	Short term, systemic effects	DNEL	100	mg/m3	
Workers / employees	Human - inhalation	Short term, local effects	DNEL	100	mg/m3	
Workers / employees	Human - dermal	Long term, systemic effects	DNEL	16171	mg/kg bw/d	
Workers / employees	Human - inhalation	Long term, systemic effects	DNEL	100	mg/m3	
Workers / employees	Human - blood	Long term, local effects	DNEL	100	mg/m3	
Workers / employees	Human - inhalation	Long term, local effects	DNEL	100	mg/m3	

WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).

8.2 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.

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.

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



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Eye/face protection:

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

Skin protection - Hand protection:

Solvent resistant protective gloves (EN 374).

Protective hand cream recommended.

If applicable

Protective Viton® / fluoroelastomer gloves (EN 374)

(Vitojet 890 / KLC)

Protective nitrile gloves (EN 374)

Minimum layer thickness in mm:

>= 0,4

Permeation time (penetration time) in minutes:

>= 480

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:

If OES or MEL is exceeded.

Filter A P3 (EN 14387), code colour brown, white

If applicable

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

pH-value:

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

n.a.

9.1 Information on basic physical and chemical properties

Physical state:

Colour:

Odour:

Odour threshold:

Liquid

Yellow, Clear

Characteristic

Not determined

Melting point/freezing point:

Initial boiling point and boiling range:

Flash point:

Evaporation rate:

Not determined
Not determined
>61 °C

Not determined

Flammability (solid, gas):

Lower explosive limit:

Not determined

Upper explosive limit:

Vapour pressure:

Not determined

Not determined

Not determined

Not determined

Vapour density (air = 1): Vapours heavier than air.

Density: 0,818 g/cm3 (15°C)



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Bulk density: n.a.

Solubility(ies):

Water solubility:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Explosive properties:

Not determined

Not determined

Not determined

Vot determined

Vot determined

Product is not explosive.

Oxidising properties: N

9.2 Other information

Miscibility: Not determined Fat solubility / solvent: Not determined Conductivity: Not determined Surface tension: Not determined Solvents content: Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity

The product has not been tested.

10.2 Chemical stability

Stable with proper storage and handling.

10.3 Possibility of hazardous reactions

No dangerous reactions are known.

10.4 Conditions to avoid

See also section 7.

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).

Octane Plus 150 mL						
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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by dermal route:	ATE	>2000	mg/kg			calculated value
Acute toxicity, by inhalation:	ATE	12,1	mg/l/4h			calculated value,
						Vapours
Acute toxicity, by inhalation:	ATE	1,8	mg/l/4h			calculated value,
						Aerosol
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.



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Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>5000	mg/kg	Rat	OECD 401 (Acute Oral	Analogous
riodio toxiony, by oral routo.	2200	70000	ing/kg	l tat	Toxicity)	conclusion
Acute toxicity, by dermal route:	LD50	>5000	mg/kg	Rabbit	OECD 402 (Acute	Analogous
Acute toxicity, by definal route.	LD30	>3000	mg/kg	INADDIL	Dermal Toxicity)	conclusion
Acute toxicity, by inhalation:	LC50	>4951	mg/m3/4h	Rat	OECD 403 (Acute	Analogous
Acute toxicity, by irinalation.	LCSU	>4931	1119/1113/411	Nai	Inhalation Toxicity)	conclusion,
					ililialation roxicity)	
Older compaign/invitations					OF CD 404 (A suits	Vapours
Skin corrosion/irritation:					OECD 404 (Acute Dermal	Not irritant,
						Analogous
0 ' ' ' ' '					Irritation/Corrosion)	conclusion
Serious eye damage/irritation:					OECD 405 (Acute Eye	Not irritant,
					Irritation/Corrosion)	Analogous
						conclusion
Respiratory or skin					OECD 406 (Skin	Not sensitizising
sensitisation:					Sensitisation)	Analogous
						conclusion
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative,
					Reverse Mutation Test)	Analogous
						conclusion
Germ cell mutagenicity:					OECD 473 (In Vitro	Negative,
					Mammalian `	Analogous
					Chromosome	conclusion
					Aberration Test)	
Germ cell mutagenicity:					OECD 474 (Mammalian	Negative,
,·					Erythrocyte	Analogous
					Micronucleus Test)	conclusion
Carcinogenicity:					OECD 453 (Combined	Negative,
caroniogornony.					Chronic	Analogous
					Toxicity/Carcinogenicity	conclusion
					Studies)	Conclusion
Reproductive toxicity:					OECD 414 (Prenatal	Negative,
Reproductive toxicity.					Developmental Toxicity	Analogous
					Study)	conclusion
Specific target organ toxicity -					OECD 408 (Repeated	Negative,
					Dose 90-Day Oral	
repeated exposure (STOT-RE):						Analogous
					Toxicity Study in	conclusion
A					Rodents)	\ \\
Aspiration hazard:		1				Yes
Symptoms:						unconsciousnes
						, headaches,
						dizziness
Other information:						Repeated
						exposure may
						cause skin
						dryness or
						cracking.

Tricarbonyl(methylcyclopentadienyl)manganese						
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	175	mg/kg	Rat		
Acute toxicity, by dermal route:	LD50	140	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	0,076	mg/l/4h	Rat		Aerosol
Skin corrosion/irritation:						Irritant
Serious eye damage/irritation:						Irritant
Specific target organ toxicity -						Negative
repeated exposure (STOT-RE):						
Specific target organ toxicity -						Irritation of the
single exposure (STOT-SE),						respiratory tract
inhalative:						



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Fuels, jet aircraft, coal solvent extn., hydrocracked hydrogenated								
Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes		
Skin corrosion/irritation:						Repeated exposure may cause skin dryness or cracking.		
Aspiration hazard:						Yes		

Toxicity / effect	Endpoint	Value	Unit	Organism	Test method	Notes
Acute toxicity, by oral route:	LD50	>2000	mg/kg	Rat		
Acute toxicity, by inhalation:	LC50	18	mg/l/4h	Rat		Vapours
Skin corrosion/irritation:				Rabbit	Regulation (EC)	Skin Irrit. 2
					440/2008 B.4 (DERMAL	
					IRRITATION/CORROSI	
					ON)	
Respiratory or skin				Guinea pig	OECD 406 (Skin	No (skin contact)
sensitisation:					Sensitisation)	
Germ cell mutagenicity:				Mouse	OECD 474 (Mammalian	Negative
					Erythrocyte	
					Micronucleus Test)	
Germ cell mutagenicity:					OECD 471 (Bacterial	Negative
					Reverse Mutation Test)	
Symptoms:						drowsiness,
						unconsciousness
						, headaches,
						fatigue,
						dizziness,
						nausea

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
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							Isolate as much
degradability:							as possible with
							an oil separator.
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:							
Other information:	AOX						According to the
							recipe, contains
							no AOX.

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.5. Results of PBT							No PBT
and vPvB assessment							substance, No
							vPvB substance
Water solubility:							Product floats on
							the water
							surface.



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12.1. Toxicity to fish:	LL50	96h	>1000	mg/l	Oncorhynchus mykiss	OECD 203 (Fish, Acute Toxicity Test)	
12.1. Toxicity to fish:	NOELR	28d	0,101	mg/l	Oncorhynchus mykiss	,	
12.1. Toxicity to daphnia:	EL50	48h	>1000	mg/l	Daphnia magna	OECD 202 (Daphnia sp. Acute Immobilisation Test)	
12.1. Toxicity to daphnia:	NOELR	21d	0,176	mg/l	Daphnia magna	,	
12.2. Persistence and degradability:		28d	80	%	activated sludge	OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)	Readily biodegradable
12.1. Toxicity to algae:	EL50	72h	>1000	mg/l	Pseudokirchneriell a subcapitata	OECD 201 (Alga, Growth Inhibition Test)	
Other organisms:	EL50	48h	>1000	mg/l	Tetrahymen pyriformis	,	

1,2,4-trimethylbenzene							
Toxicity / effect	Endpoint	Time	Value	Unit	Organism	Test method	Notes
12.1. Toxicity to fish:	LC50	96h	7,72	mg/l	Pimephales promelas		
12.1. Toxicity to daphnia:	EC50	48h	3,6	mg/l	Daphnia magna		
12.3. Bioaccumulative potential:	BCF		275	%			
12.3. Bioaccumulative potential:	Log Kow		3,63	%			Low

SECTION 13: Disposal considerations

13.1 Waste treatment methods

For the substance / mixture / residual amounts

Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of. EC disposal code no.:

The waste codes are recommendations based on the scheduled use of this product.

Owing to the user's specific conditions for use and disposal, other waste codes may be

allocated under certain circumstances. (2014/955/EU)

07 06 04 other organic solvents, washing liquids and mother liquors

07 07 04 other organic solvents, washing liquids and mother liquors

Recommendation:

Sewage disposal shall be discouraged.

Pay attention to local and national official regulations.

Implement substance recycling.

E.g. suitable incineration plant.

For contaminated packing material

Pay attention to local and national official regulations.

Empty container completely.

Suitable incineration plant.

SECTION 14: Transport information

General statements

14.1. UN number:

Transport by road/by rail (ADR/RID)

14.2. UN proper shipping name:

n.a.



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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 (national implementation of the Directive 92/85/EEC)!

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

Comply with trade association/occupational health regulations.

Directive 2010/75/EU (VOC): ~ 95,5 %

15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections:

2, 3, 8, 11, 12, 16

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
Acute Tox. 4, H332	Classification according to calculation procedure.
Asp. Tox. 1, H304	Classification according to calculation procedure.
Carc. 2, H351	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).

H330 Fatal if inhaled.

H310 Fatal in contact with skin.

H226 Flammable liquid and vapour.



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H301 Toxic if swallowed.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Acute Tox. — Acute toxicity - inhalation Asp. Tox. — Aspiration hazard

Carc. — Carcinogenicity

Aquatic Chronic — Hazardous to the aquatic environment - chronic

Acute Tox. — Acute toxicity - oral

Aquatic Acute — Hazardous to the aquatic environment - acute

Acute Tox. — Acute toxicity - dermal

Flam. Liq. — Flammable liquid

STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation

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

Eye Irrit. — Eye irritation Skin Irrit. — Skin irritation

Any abbreviations and acronyms used in this document:

AC **Article Categories**

according, according to acc., acc. to

ACGIH American Conference of Governmental Industrial Hygienists

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

Article number Art., Art. no.

Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) ATF

Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany) BAM

BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)

BCF Bioconcentration factor

BGV Berufsgenossenschaftliche Vorschrift (= Accident Prevention Regulation)

Butylhydroxytoluol (= 2,6-Di-t-butyl-4-methyl-phenol) BHT BMGV Biological monitoring guidance value (EH40, UK)

Biochemical oxygen demand BOD

BSEF Bromine Science and Environmental Forum

body weight hw

CAS Chemical Abstracts Service

Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants and Other Fluids CEC

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

Cosmetic, Toiletry, and Fragrance Association CTFA

DMEL Derived Minimum Effect Level

DNEL Derived No Effect Level

DOC Dissolved organic carbon

DT50 Dwell Time - 50% reduction of start concentration

Deutscher Verband für Schweißen und verwandte Verfahren e.V. (= German Association for Welding and Allied Processes) DVS

dw dry weight

for example (abbreviation of Latin 'exempli gratia'), for instance e.g.

ΕČ **European Community**



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ECHA European Chemicals Agency European Economic Area **European Economic Community** FFC

EINECS European Inventory of Existing Commercial Chemical Substances

European List of Notified Chemical Substances **ELINCS**

ΕN **European Norms**

EPA United States Environmental Protection Agency (United States of America)

Environmental Release Categories FRC

ES Exposure scenario

et cetera etc. EU

European Union

European Waste Catalogue **EWC**

Fax number Fax. general gen.

ĞHS Globally Harmonized System of Classification and Labelling of Chemicals

Global warming potential **GWP**

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)

Inhibitory concentration IC

IMDG-code International Maritime Code for Dangerous Goods

including, inclusive incl.

IUCLID International Uniform ChemicaL Information Database

lethal concentration LC

LC50 lethal concentration 50 percent kill LCLo lowest published lethal concentration

Lethal Dose of a chemical ΙD 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

not applicable n.a. not available n.av. not checked n.c. n.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 NOEC No Observed Effect Concentration NOEL No Observed Effect Level

ODP Ozone Depletion Potential

OECD Organisation for Economic Co-operation and Development

org. organic

polycyclic aromatic hydrocarbon PAH **PBT** persistent, bioaccumulative and toxic

PC Chemical product category

PΕ Polyethylene

PNEC Predicted No Effect Concentration POCP Photochemical ozone creation potential

mag 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)

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.



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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

Telephone Tel.

ThOD Theoretical oxygen demand

TOC Total organic carbon

TRGS Technische Regeln für Gefahrstoffe (=Technical Regulations for Hazardous Substances) **UN RTDG** United Nations Recommendations on the Transport of Dangerous Goods Verordnung über brennbare Flüssigkeiten (= Regulation for flammable liquids (Austria)) VbF

VOC Volatile organic compounds

vPvB very persistent and very bioaccumulative

WEL-TWA, WEL-STEL WÉL-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: Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

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