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

1.1 Product identifier

Product name : OKS 511

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

Use of the Sub- : Lubricant

stance/Mixture

Recommended restrictions

on use

Restricted to professional users.

1.3 Details of the supplier of the safety data sheet

Company : OKS Spezialschmierstoffe GmbH

Ganghoferstr. 47

D-82216 Maisach-Gernlinden Tel.: +49 8142 3051 500 Fax.: +49 8142 3051 599 info@oks-germany.com

E-mail address of person : mcm@oks-germany.com

responsible for the SDS Material Compliance Management

National contact :

1.4 Emergency telephone number

Emergency telephone num- : +49 8142 3051 517

ber Warszawa: +48 22 619 66 54

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1 H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

Skin irritation, Category 2 H315: Causes skin irritation.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Specific target organ toxicity - single exposure, Category 3, Central nervous

H336: May cause drowsiness or dizziness.



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system

Aspiration hazard, Category 1 H304: May be fatal if swallowed and enters air-

ways.

Long-term (chronic) aquatic hazard, Cat-

egory 3

H412: Harmful to aquatic life with long lasting ef-

fects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms









Signal word : Danger

Hazard statements : H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated. H304 May be fatal if swallowed and enters air-

ways.

H315 Causes skin irritation.

H318 Causes serious eye damage.
 H336 May cause drowsiness or dizziness.
 H412 Harmful to aquatic life with long lasting ef-

fects.

Precautionary statements : Prevention:

P210 Keep away from heat, hot surfaces, sparks,

open flames and other ignition sources. No

smoking.

P211 Do not spray on an open flame or other

ignition source.

P251 Do not pierce or burn, even after use.

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a

POISON CENTER/ doctor.

P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously

with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

Storage:

P410 + P412 Protect from sunlight. Do not expose to

temperatures exceeding 50 °C/ 122 °F.

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Hazardous components which must be listed on the label:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha

n-butyl acetate

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha

butan-1-ol

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Active substance with propellant

Solvent Silicone resin graphite

Molybdenum disulfide

Components

oomponents				
Chemical name	CAS-No.	Classification	specific concen-	Concentration
	EC-No.		tration limit	(% w/w)
			M-Factor	
	Index-No.		Notes	
	Registration number		Acute toxicity	
			estimate	
Naphtha (petroleum),	64742-49-0	Flam. Liq.2; H225		>= 10 - < 20
hydrotreated light;	265-151-9	Skin Irrit.2; H315		
Low boiling point hy-		STOT SE3; H336	Note P	
drogen treated naph-	649-328-00-1	Asp. Tox.1; H304		
tha		Aquatic Chronic2;		
		H411		
isobutane	75-28-5	Flam. Gas1A;		>= 10 - < 20
	200-857-2	H220		
		Press. GasCompr.	Note U (table	



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	601-004-00-0 01-2119485395-27- XXXX	Gas; H280	3.1), Note C	
n-butyl acetate	123-86-4 204-658-1	Flam. Liq.3; H226 STOT SE3; H336; EUH066		>= 1 - < 10
	607-025-00-1 01-2119485493-29- XXXX			
Naphtha (petroleum), hydrotreated light; Low boiling point hy- drogen treated naph-	64742-49-0 927-241-2 649-328-00-1	Flam. Liq.3; H226 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic3;	Note P	>= 2,5 - < 10
tha	01-2119471843-32- xxxx	H412; EUH066		
xylene	1330-20-7 215-535-7	Flam. Liq.3; H226 Acute Tox.4; H332 Acute Tox.4; H312	Note C	>= 1 - < 10
	601-022-00-9 01-2119488216-32- XXXX	Skin Irrit.2; H315 Eye Irrit.2; H319 STOT SE3; H335 STOT RE2; H373 STOT RE2; H373 Asp. Tox.1; H304		
ethylbenzene	100-41-4 202-849-4	Flam. Liq.2; H225 Acute Tox.4; H332 STOT RE2; H373		>= 1 - < 2,5
	601-023-00-4 01-2119489370-35- XXXX	Asp. Tox.1; H304 Aquatic Chronic3; H412		
butan-1-ol	71-36-3 200-751-6	Flam. Liq.3; H226 Acute Tox.4; H302 Skin Irrit.2; H315		>= 1 - < 3
	603-004-00-6 01-2119484630-38- XXXX	Eye Dam.1; H318 STOT SE3; H336 STOT SE3; H335		
Substances with a work	place exposure limit :	1		
butane	106-97-8 203-448-7	Flam. Gas1A; H220 Press. GasCompr.	Note U (table	>= 20 - < 30
	601-004-00-0	Gas; H280	3.1), Note C	
propane	74-98-6 200-827-9	Flam. Gas1A; H220 Press. GasCompr.	Note U (table	>= 10 - < 20
	601-003-00-5	Gas; H280	3.1)	



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	01-2119486944-21- XXXX		
molybdenum disul- phide	1317-33-5 215-263-9	Not classified	>= 1 - < 10
Graphite	7782-42-5 231-955-3	Not classified	>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : Call a physician or poison control centre immediately.

Remove person to fresh air. If signs/symptoms continue, get

medical attention.

Keep patient warm and at rest.

If unconscious, place in recovery position and seek medical

advice.

Keep respiratory tract clear.

If breathing is irregular or stopped, administer artificial respira-

tion.

In case of skin contact : Take off all contaminated clothing immediately.

Wash off immediately with soap and plenty of water. Get medical attention immediately if irritation develops and

persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids,

for at least 10 minutes.

Get medical attention immediately.

If swallowed : Move the victim to fresh air.

If accidentally swallowed obtain immediate medical attention.

Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water.

Aspiration hazard if swallowed - can enter lungs and cause

damage.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation may provoke the following symptoms:

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Unconsciousness

Dizziness Drowsiness Headache Nausea Tiredness

Skin contact may provoke the following symptoms:

Erythema

Aspiration may cause pulmonary oedema and pneumonitis.

Risks : Central nervous system depression

Risk of product entering the lungs on vomiting after ingestion.

Health injuries may be delayed.

Causes skin irritation.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : ABC powder

Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Fire Hazard

Do not let product enter drains.

Contains gas under pressure; may explode if heated.

Beware of vapours accumulating to form explosive concentra-

tions. Vapours can accumulate in low areas.

Hazardous combustion prod- :

ucts

Carbon oxides Sulphur oxides

Metal oxides

5.3 Advice for firefighters

Special protective equipment :

for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposi-

tion products may be a hazard to health.

Further information : Standard procedure for chemical fires.

Collect contaminated fire extinguishing water separately. This

must not be discharged into drains. Cool containers/tanks with water spray.



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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Evacuate personnel to safe areas.

Ensure adequate ventilation. Remove all sources of ignition. Do not breathe vapours or spray mist.

Do not breathe dust/ fume/ gas/ mist/ vapours/ spray. Refer to protective measures listed in sections 7 and 8. Only qualified personnel equipped with suitable protective

equipment may intervene.

6.2 Environmental precautions

Environmental precautions : Do not allow contact with soil, surface or ground water.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible ab-

sorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

Keep in suitable, closed containers for disposal.

Non-sparking tools should be used.

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Do not use in areas without adequate ventilation.

Do not breathe vapours or spray mist.

In case of insufficient ventilation, wear suitable respiratory

equipment.

Avoid contact with skin and eyes. For personal protection see section 8.

Keep away from fire, sparks and heated surfaces.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Wash hands and face before breaks and immediately after

handling the product.

Do not get in eyes or mouth or on skin.

Do not get on skin or clothing.

Do not ingest.



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Do not use sparking tools.

These safety instructions also apply to empty packaging which

may still contain product residues.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn,

even after use.

Hygiene measures : Wash face, hands and any exposed skin thoroughly after

handling.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Store in accordance with the particular na-

tional regulations.

7.3 Specific end use(s)

Specific use(s) : Specific instructions for handling, not required.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
butane	106-97-8	NDS	1.900 mg/m3	PL OEL (2018-07-07)
		NDSch	3.000 mg/m3	PL OEL (2018-07-07)
Naphtha (petrole- um), hydrotreated light; Low boiling point hydrogen treated naphtha	64742-49-0	NDS	500 mg/m3	PL OEL (2018-07-07)
		NDSch	1.500 mg/m3	PL OEL (2018-07-07)
propane	74-98-6	NDS	1.800 mg/m3	PL OEL (2018-07-07)
molybdenum di- sulphide	1317-33-5	NDS	4 mg/m3 (Molybdenum)	PL OEL (2018-07-07)
		NDSch	10 mg/m3 (Molybdenum)	PL OEL (2018-07-07)
n-butyl acetate	123-86-4	NDS	240 mg/m3	PL OEL (2018-07-07)
		NDSch	720 mg/m3	PL OEL (2018-07-07)



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		STEL	150 ppm	2019/1831/E	
			723 mg/m3	U (2019-10-31)	
	Further information: Indicative				
		TWA	50 ppm 241 mg/m3	2019/1831/E U	
	Frontle en inferm			(2019-10-31)	
N. 141 / 4 1		nation: Indicative		DI OFI	
Naphtha (petrole- um), hydrotreated light; Low boiling point hydrogen treated naphtha	64742-49-0	NDS	500 mg/m3	PL OEL (2018-07-07)	
		NDSch	1.500 mg/m3	PL OEL (2018-07-07)	
xylene	1330-20-7	TWA	50 ppm	2000/39/EC	
			221 mg/m3	(2000-06-16)	
	Further inforn skin, Indicativ		possibility of significant upt	ake through the	
		STEL	100 ppm	2000/39/EC	
			442 mg/m3	(2000-06-16)	
	Further inforn	nation: Identifies the	possibility of significant upt	ake through the	
	skin, Indicativ	е		_	
		NDS	100 mg/m3	PL OEL (2018-07-07)	
	Further inforn	nation: Skin	-		
		NDSch	200 mg/m3	PL OEL (2018-07-07)	
	Further inforn	nation: Skin		(======================================	
ethylbenzene	100-41-4	TWA	100 ppm	2000/39/EC	
			442 mg/m3	(2000-06-16)	
	Further inform skin, Indicativ		possibility of significant upt		
		STEL	200 ppm	2000/39/EC	
			884 mg/m3	(2000-06-16)	
	Further inform skin, Indicativ	Further information: Identifies the possibility of significant uptake through the			
		NDS	200 mg/m3	PL OEL (2018-07-07)	
	Further inforn	nation: Skin	1	(2010 01-01)	
	i didici iiiiOIII	NDSch	400 mg/m3	PL OEL	
		INDOCII	TOO HIG/IIIO	(2018-07-07)	
	Further inforn	nation: Skin	_1	(2010 01 01)	
butan-1-ol	71-36-3	NDS	50 mg/m3	PL OEL (2018-07-07)	
	Further inforn	nation: Skin			
	1 2.10.0.1110111	NDSch	150 mg/m3	PL OEL (2018-07-07)	
	Further information: Skin				
Graphite	7782-42-5	NDS (inhalable	4 mg/m3	PL OEL	
O aprillo	1102 72 0	fraction)	. mg/mo	(2018-07-07)	

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Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Naphtha (petroleum), hydrotreated light; Low boiling point hy- drogen treated naph- tha	Workers	Inhalation	Long-term systemic effects	1300 mg/m3
	Workers	Inhalation	Long-term local ef- fects	840 mg/m3
	Workers	Inhalation	Acute local effects	1100 mg/m3
n-butyl acetate	Workers	Inhalation	Long-term systemic effects	300 mg/m3
	Workers	Inhalation	Acute systemic effects	600 mg/m3
	Workers	Dermal	Long-term local ef- fects	11 mg/cm2
xylene	Workers	Inhalation	Long-term exposure, Systemic effects	77 mg/m3
	Workers	Inhalation	Short-term exposure, Systemic effects	289 mg/m3
	Workers	Skin contact	Long-term exposure, Systemic effects	180 mg/kg
	Consumers	Inhalation	Long-term exposure, Systemic effects	14,8 mg/m3
	Consumers	Inhalation	Short-term exposure, Systemic effects	174 mg/m3
	Consumers	Ingestion	Long-term exposure, Systemic effects	1,6 mg/kg
ethylbenzene	Workers	Skin contact	Long-term systemic effects	180 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	77 mg/m3
	Workers	Inhalation	Acute local effects	293 mg/m3
butan-1-ol	Workers	Inhalation	Long-term local ef- fects	310 mg/m3
Graphite	Workers	Inhalation	Long-term local ef- fects	1,2 mg/m3

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
n-butyl acetate	Fresh water	0,18 mg/l
	Marine water	0,018 mg/l
	Microbiological Activity in Sewage Treat-	35,6 mg/l
	ment Systems	
	Fresh water sediment	0,981 mg/kg
	Marine sediment	0,0981 mg/kg
	Soil	0,09 mg/kg
xylene	Fresh water	0,327 mg/l

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	Marine water	0,327 mg/l
	Fresh water sediment	12,46 mg/l
	Marine sediment	12,46 mg/l
	Soil	2,31 mg/kg
ethylbenzene	Fresh water	0,1 mg/l
	Marine water	0,01 mg/l
	Intermittent use/release	0,1 mg/l
	Microbiological Activity in Sewage Treat-	9,6 mg/l
	ment Systems	
	Fresh water sediment	13,7 mg/kg
	Marine sediment	1,37 mg/kg
	Soil	2,68 mg/kg
	Oral	20 mg/kg
butan-1-ol	Fresh water	0,082 mg/l
	Marine water	0,008 mg/l
	Intermittent use/release	2,25 mg/l
	Microbiological Activity in Sewage Treat-	2476 mg/l
	ment Systems	
	Fresh water sediment	0,324 mg/kg dry
		weight (d.w.)
	Marine sediment	0,032 mg/kg dry
		weight (d.w.)
	Soil	0,017 mg/kg dry weight (d.w.)

8.2 Exposure controls

Engineering measures

Use only in an area equipped with explosion proof exhaust ventilation. Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Material : butyl-rubber
Break through time : > 10 min
Protective index : Class 1

Remarks : Wear protective gloves. The break through time depends

amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each

case.

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374

derived from it.

Skin and body protection : Choose body protection in relation to its type, to the concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

Respiratory protection : Use respiratory protection unless adequate local exhaust ven-

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tilation is provided or exposure assessment demonstrates that

exposures are within recommended exposure guidelines.

Short term only

Filter type : Filter type A-P

Protective measures : The type of protective equipment must be selected according

to the concentration and amount of the dangerous substance

at the specific workplace.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : aerosol

Colour : black

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : -161 °C (1.013 hPa)

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit / Upper

flammability limit

10,9 %(V)

Lower explosion limit / Lower

flammability limit

0,6 %(V)

Flash point : -60 °C

Method: Abel-Pensky

Auto-ignition temperature : No data available

Decomposition temperature : No data available

pH : Not applicable

substance/mixture is non-soluble (in water)

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : < 20,5 mm2/s (40 °C)

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Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : 3.600 hPa (20 °C)

Relative density : 0,7 (20 °C)

Reference substance: Water The value is calculated

Density : 0,70 g/cm3

(20 °C)

Bulk density : No data available

Relative vapour density : No data available

9.2 Other information

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : No data available

Metal corrosion rate : Not corrosive to metals

Evaporation rate : No data available

Sublimation point : No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

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Strong sunlight for prolonged periods.

Risk of receptacle bursting.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product:

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Remarks: Effects due to ingestion may include:

Symptoms: Central nervous system depression

Acute inhalation toxicity : Acute toxicity estimate: > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

Remarks: Respiration of solvent vapour may cause dizziness.

Harmful by inhalation.

Symptoms: Inhalation may provoke the following symptoms:, Respiratory disorder, Dizziness, Drowsiness, Vomiting, Fa-

tigue, Vertigo, Central nervous system depression

Acute dermal toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Symptoms: Redness, Local irritation

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : LC50 (Rat): > 25,2 mg/l

Exposure time: 4 h Test atmosphere: vapour



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Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2.000 mg/kg

Method: OECD Test Guideline 402

GLP: yes

Assessment: The substance or mixture has no acute dermal

toxicity

isobutane:

Acute inhalation toxicity : LC50 (Rat): 658 mg/l

Exposure time: 4 h
Test atmosphere: gas

n-butyl acetate:

Acute oral toxicity : LD50 (Rat): 10.768 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 21 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

GLP: yes

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 17.600 mg/kg

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

xylene:

Acute oral toxicity : LD50 (Rat): 4.300 mg/kg

Acute inhalation toxicity : Assessment: The component/mixture is moderately toxic after

short term inhalation.

Acute dermal toxicity : Assessment: The component/mixture is moderately toxic after

single contact with skin.

ethylbenzene:

Acute oral toxicity : LD50 (Rat): 3.500 mg/kg

Acute inhalation toxicity : LC50 (Rat): 17,2 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Acute dermal toxicity : LD50 (Rabbit): 15.400 mg/kg

butan-1-ol:

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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Acute oral toxicity : LD50 (Rat): 2.292 mg/kg

Method: OECD Test Guideline 401

Assessment: The component/mixture is moderately toxic after

single ingestion.

Acute inhalation toxicity : LC50 (Rat): > 17,76 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): 3.430 mg/kg

Method: OECD Test Guideline 402

GLP: yes

butane:

Acute inhalation toxicity : LC50 (Rat): 658 mg/l

Exposure time: 4 h Test atmosphere: gas

molybdenum disulphide:

Acute oral toxicity : LD50 (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 (Rat): > 16.000 mg/kg

Graphite:

Acute oral toxicity : LD50 (Rat): > 2.000 mg/kg

Method: OECD Test Guideline 401

Assessment: The substance or mixture has no acute oral tox-

icity

Skin corrosion/irritation

Product:

Remarks : Irritating to skin.

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Species : Rabbit

Assessment : Irritating to skin.

Method : OECD Test Guideline 404

Result : Irritating to skin.

GLP : yes

n-butyl acetate:

Species : Rabbit

Assessment : No skin irritation

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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Method : OECD Test Guideline 404

Result : Repeated exposure may cause skin dryness or cracking.

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Result : Repeated exposure may cause skin dryness or cracking.

xylene:

Species : Rabbit

Assessment : Irritating to skin. Result : Irritating to skin.

ethylbenzene:

Species : Rabbit

Result : Mild skin irritation

butan-1-ol:

Species : Rabbit

Assessment : Irritating to skin. Result : Irritating to skin.

molybdenum disulphide:

Assessment : No skin irritation Result : No skin irritation

Serious eye damage/eye irritation

Product:

Result : Risk of serious damage to eyes.

Remarks : Irritating to eyes.

Remarks : Risk of serious damage to eyes.

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes

n-butyl acetate:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

GLP : yes



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xylene:

Species : Rabbit

Assessment : Irritating to eyes. Result : Irritating to eyes.

ethylbenzene:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation

butan-1-ol:

Species : Rabbit

Assessment : Risk of serious damage to eyes.

Method : OECD Test Guideline 405

Result : Risk of serious damage to eyes.

GLP : yes

molybdenum disulphide:

Assessment : No eye irritation Result : No eye irritation

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Test Type : Buehler Test Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

GLP : yes

n-butyl acetate:

Test Type : Maximisation Test

Exposure routes : Dermal Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

xylene:



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Species : Mouse

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 429

Result : Did not cause sensitisation on laboratory animals.

ethylbenzene:

Assessment : Does not cause skin sensitisation.
Result : Does not cause skin sensitisation.

butan-1-ol:

Species : Mouse

Assessment : Did not cause sensitisation on laboratory animals.

Method : OECD Test Guideline 429

Result : Did not cause sensitisation on laboratory animals.

molybdenum disulphide:

Assessment : Does not cause skin sensitisation.
Result : Does not cause skin sensitisation.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

n-butyl acetate:

Genotoxicity in vitro : Test Type: Ames test

Test system: Salmonella typhimurium Method: OECD Test Guideline 471

Result: negative

Test Type: Chromosome aberration test in vitro

Test system: Chinese hamster cells Method: OECD Test Guideline 473

Result: negative

Genotoxicity in vivo : Species: Mouse

Application Route: Oral

Method: OECD Test Guideline 474

Result: negative

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects., Animal testing did not show any mutagenic

effects.

xylene:



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Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

ethylbenzene:

Germ cell mutagenicity- As-

sessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

molybdenum disulphide:

Germ cell mutagenicity- As-

sessment

Animal testing did not show any mutagenic effects.

Carcinogenicity

Product:

Remarks : No data available

Components:

n-butyl acetate:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

xylene:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

ethylbenzene:

Carcinogenicity - Assess-

ment

Not classifiable as a human carcinogen.

molybdenum disulphide:

Carcinogenicity - Assess-

ment

No evidence of carcinogenicity in animal studies.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

: Remarks: No data available

Components:

n-butyl acetate:

Effects on fertility : Test Type: Two-generation study

Species: Rat

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Application Route: inhalation (vapour)
General Toxicity - Parent: NOAEC: 750 mg/l
General Toxicity F1: NOAEC: 750 mg/l
General Toxicity F2: NOAEC: 750 mg/l
Method: OECD Test Guideline 416

Result: Embryotoxic effects and adverse effects on the off-

spring were detected.

Reproductive toxicity - As-

sessment

- Fertility -

No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

- Teratogenicity -

No toxicity to reproduction

xylene:

Reproductive toxicity - As-

sessment

- Fertility -

No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

ethylbenzene:

Reproductive toxicity - As-

sessment

- Fertility -

No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

STOT - single exposure

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Exposure routes : Inhalation

Target Organs : Central nervous system

Assessment : May cause drowsiness or dizziness.

n-butyl acetate:

Exposure routes : Inhalation

Target Organs : Central nervous system

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with narcotic effects.

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Exposure routes : Inhalation

Assessment : May cause drowsiness or dizziness.

xylene:



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Exposure routes : Inhalation

Target Organs : Respiratory system

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with respiratory tract

irritation.

ethylbenzene:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

butan-1-ol:

Exposure routes : Inhalation

Target Organs : Respiratory system

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with respiratory tract

irritation.

Exposure routes : Inhalation

Target Organs : Central nervous system

Assessment : The substance or mixture is classified as specific target organ

toxicant, single exposure, category 3 with narcotic effects.

molybdenum disulphide:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, single exposure.

STOT - repeated exposure

Components:

n-butyl acetate:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

xylene:

Exposure routes : Inhalation

Target Organs : Central nervous system

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 2.

Exposure routes : Ingestion Target Organs : Liver, Kidney

Assessment : The substance or mixture is classified as specific target organ

toxicant, repeated exposure, category 2.

ethylbenzene:

Exposure routes : Inhalation
Target Organs : hearing organs

Assessment : The substance or mixture is classified as specific target organ

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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toxicant, repeated exposure, category 2.

butan-1-ol:

Assessment The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

molybdenum disulphide:

Assessment The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

Repeated dose toxicity

Product:

Remarks This information is not available.

Components:

n-butyl acetate:

Species Rat

NOAEL 125 mg/kg **Application Route** Oral

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

May be fatal if swallowed and enters airways.

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

May be fatal if swallowed and enters airways.

n-butyl acetate:

No aspiration toxicity classification

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

May be fatal if swallowed and enters airways.

xylene:

May be fatal if swallowed and enters airways.

ethylbenzene:

May be fatal if swallowed and enters airways.



according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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butan-1-ol:

No aspiration toxicity classification

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

Further information

Product:

Remarks : Risks of irreversible effects after a single exposure.

Ingestion causes irritation of upper respiratory system and

gastrointestinal disturbance.
Possible risk of irreversible effects.

Components:

molybdenum disulphide:

Remarks : Information given is based on data on the components and

the toxicology of similar products.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Toxicity to fish : Remarks: Harmful to aquatic organisms, may cause long-term

adverse effects in the aquatic environment.

Toxicity to daphnia and other :

aquatic invertebrates

Remarks: No data available

Toxicity to algae/aquatic

plants

: Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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Toxicity to fish LC50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l

> Exposure time: 96 h Test Type: semi-static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 4,5 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 3,1

Exposure time: 72 h Test Type: static test

Ecotoxicology Assessment

Acute aquatic toxicity Toxic to aquatic life.

Chronic aquatic toxicity Toxic to aquatic life with long lasting effects.

n-butyl acetate:

LC50 (Pimephales promelas (fathead minnow)): 18 mg/l Toxicity to fish

Exposure time: 96 h

Test Type: flow-through test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia (water flea)): 44 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae/aquatic

plants

EC50 (Desmodesmus subspicatus (green algae)): 397 mg/l

Exposure time: 72 h Test Type: static test

EC50 (Tetrahymena pyriformis): 356 mg/l Toxicity to microorganisms

Exposure time: 40 h

Test Type: Growth inhibition

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 23 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: Reproduction Test

GLP: yes

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Ecotoxicology Assessment

Chronic aquatic toxicity Harmful to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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xylene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2,6 mg/l

Exposure time: 96 h
Test Type: static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 3,82 mg/l

Exposure time: 48 h

Test Type: flow-through test

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 2,2

mg/l

Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: ves

Toxicity to microorganisms : EC50 (activated sludge): > 157 mg/l

Exposure time: 3 h

Test Type: Respiration inhibition Method: OECD Test Guideline 209

Toxicity to fish (Chronic tox-

icity)

NOEC: > 1,3 mg/l Exposure time: 56 d

Species: Oncorhynchus mykiss (rainbow trout)

Test Type: flow-through test

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

EC50: 2,90 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: static test

Method: OECD Test Guideline 211

GLP: yes

ethylbenzene:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 4,2 mg/l

Exposure time: 96 h
Test Type: semi-static test

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 2,4 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae/aquatic

plants

EC50 (Skeletonema costatum (marine diatom)): 4,6 mg/l

Exposure time: 72 h Test Type: static test

Toxicity to fish (Chronic tox-

icity)

NOEC: 3,3 mg/l

Exposure time: 96 d

Toxicity to daphnia and other : NOEC: 0,96 mg/l

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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aquatic invertebrates (Chron-

ic toxicity)

Exposure time: 7 d

Species: Ceriodaphnia dubia (water flea)

Test Type: semi-static test

butan-1-ol:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 1.376 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

GLP: yes

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): 1.328 mg/l

Exposure time: 48 h
Test Type: static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 225

mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

Toxicity to microorganisms : EC10 (Pseudomonas putida): 2.476 mg/l

Exposure time: 17 h Test Type: static test Method: DIN 38 412 Part 8

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 4,1 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Method: OECD Test Guideline 211

GLP: yes

molybdenum disulphide:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l

Exposure time: 96 h

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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Physico-chemical removabil- : Remarks: No data available

ity

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: 90,35 % Exposure time: 28 d

n-butyl acetate:

Biodegradability : Test Type: Primary biodegradation

Result: rapidly biodegradable

Biodegradation: 83 % Exposure time: 28 d

Method: OECD Test Guideline 301D

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Biodegradability : Result: rapidly biodegradable

xylene:

Biodegradability : Result: Readily biodegradable.

ethylbenzene:

Biodegradability : Result: Readily biodegradable.

butan-1-ol:

Biodegradability : Test Type: aerobic

Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: > 92 % Exposure time: 28 d

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: This mixture contains no substance considered to

be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very

persistent and very bioaccumulating (vPvB).

Components:

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

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Partition coefficient: n-

octanol/water

: log Pow: 3,4 - 5,2

isobutane:

Partition coefficient: n-

: log Pow: 2,88

octanol/water

Method: OECD Test Guideline 107

n-butyl acetate:

Partition coefficient: n-

log Pow: 2,3 (25 °C)

octanol/water

pH: 7

Method: OECD Test Guideline 117

GLP: yes

Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

: Remarks: No data available

xylene:

Bioaccumulation : Bioconcentration factor (BCF): 25,9

Partition coefficient: n-

octanol/water

: log Pow: 2,77 - 3,15

ethylbenzene:

Bioaccumulation : Bioconcentration factor (BCF): 1

Partition coefficient: n-

octanol/water

log Pow: 3,6 (20 °C)

butan-1-ol:

Partition coefficient: n-

log Pow: 1 (25 °C) pH: 7

octanol/water

Method: OECD Test Guideline 117

GLP: yes

butane:

Partition coefficient: n-

log Pow: 2,89

octanol/water

Method: OECD Test Guideline 107

propane:

Partition coefficient: n-

octanol/water

log Pow: 2,36

Graphite:



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Partition coefficient: n-

octanol/water

Remarks: No data available

12.4 Mobility in soil

Product:

Remarks: No data available Mobility

Distribution among environ-

mental compartments

Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

This substance/mixture contains no components considered Assessment

> to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

Components:

n-butyl acetate:

Assessment Non-classified PBT substance. Non-classified vPvB substance

xylene:

Non-classified PBT substance. Non-classified vPvB substance Assessment

ethylbenzene:

Non-classified PBT substance. Non-classified vPvB substance Assessment

12.6 Endocrine disrupting properties

Product:

The substance/mixture does not contain components consid-Assessment

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological infor-

mation

Harmful to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and

national regulations.

Waste codes should be assigned by the user based on the

application for which the product was used.

Contaminated packaging : Packaging that is not properly emptied must be disposed of as

the unused product.

Offer empty spray cans to an established disposal company. Pressurized container: Do not pierce or burn, even after use.

The following Waste Codes are only suggestions:

Waste Code : unused product, packagings not completely emptied

16 05 04*, gases in pressure containers (including halons)

containing hazardous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADN : UN 1950
ADR : UN 1950
RID : UN 1950
IMDG : UN 1950
IATA : UN 1950

14.2 UN proper shipping name

ADN : AEROSOLS
ADR : AEROSOLS
RID : AEROSOLS
IMDG : AEROSOLS

IATA : Aerosols, flammable

14.3 Transport hazard class(es)

ADN : 2
ADR : 2
RID : 2
IMDG : 2.1



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IATA : 2.1

14.4 Packing group

ADN

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1

ADR

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1 Tunnel restriction code : (D)

RID

Packing group : Not assigned by regulation

Classification Code : 5F Hazard Identification Number : 23 Labels : 2.1

IMDG

Packing group : Not assigned by regulation

Labels : 2.1 EmS Code : F-D, S-U

IATA (Cargo)

Packing instruction (cargo : 203

aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

IATA (Passenger)

Packing instruction (passen: 203

ger aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

14.5 Environmental hazards

ADN

Environmentally hazardous : no

ADR

Environmentally hazardous : no

rid

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data

according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

14.7 Maritime transport in bulk according to IMO instruments

Remarks : Not applicable for product as supplied.

SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Not applicable

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).

(EU SVHC)

This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH),

Article 57).

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

(EU. REACH-Annex XIV)

Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer

(EC 1005/2009)

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast) (EU POP) : Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals

(EU PIC)

Not applicable

: P2

P5c

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

P3a FLAMMABLE AEROSOLS

34 Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending



according to Regulation (EC) No. 1907/2006 - PL (Commission Regulation (EU) 2020/878)



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streams),(d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

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Liquefied extremely flammable gases (including LPG) and natural gas

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial

emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 83,69 %

Other regulations:

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

Act of 25 February 2011 on chemical substances and their mixtures (i.e. Journal of Laws of 2019, No. 0, item 1225)

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (Official Journal of the European Union L 353 from 31.12.2008) with further adaptation to technical progress (ATP).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Union L 396 from 30.12.2006, as amended).

Commission Regulation (EU) 2020/878

Ordinance of the Minister of Health of 10 August 2012 concerning the criteria and procedure of classification of chemical substances and their mixtures (consolidated text Dz. U. of 2015., pos. 208).

Ordinance of the Minister of Economy, Labour and Social Policy of 21st December 2005 concerning the basic requirements for personal protective equipment (Dz. U. Nr. 259, item 2173). Ordinance of the Minister of Labour and Social Policy of 12 June 2018 concerning the highest allowable concentrations and levels of the agents harmful for health in the workplace (Dz.U 2018 pos 1286, with later amendments).

Ordinance of the Minister of Health of 2nd February 2011 concerning tests and measurement of agents harmful for health in the workplace (Dz. U. Nr. 33, item 166 wraz z późn. zm.). Ordinance of the Minister of Health of 30th December 2004 on the health and safety of workers related to chemical agents at work (Dz. U. from 2005, Nr. 11, item 86, as amended). Act of 14 December 2012. on Waste (Journal of Laws of 2013. pos. 21, as amended). Act of 13 June 2013. On packaging and packaging waste Journal. U. of 2013. Item. 888, as



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amended).

Ordinance of the Minister of Climate of 2nd January 2020 on Waste Catalog (Dz. U. 2020 item 10).

Ordinance of the Minister of Environment on the requirements for carrying out the process of thermal treatment of waste and how to deal with waste produced in the process. (Dz. U. of 2016.. Pos. 108)

Act of 19 August 2011 on transport of dangerous goods (Dz. U. Nr. 227, item 1367, as amended).

Government Statement of 18 February 2019 on enforcing of changes Annexes A and B of Agreement concerning international transport of dangerous goods by road (ADR) (Dz. U. 2019, item 769).

Ordinance of the Minister of Health of 20th April 2012 concerning labeling of containers of dangerous substances and dangerous mixtures and some mixtures ((consolidated text) Dz. U. z 2015 nr. 0 poz. 450).

Ordinance of the Minister of Health of 11th June 2012 concerning categories of dangerous substances and dangerous mixtures for which containers must be fitted with child-resistant fastenings and a tactile warning of danger (Dz. U. from 2012, item 688 as amended).

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-Statements

EUH066 : Repeated exposure may cause skin dryness or cracking.

H220 : Extremely flammable gas.

H225 : Highly flammable liquid and vapour.

H226 : Flammable liquid and vapour.

H280 : Contains gas under pressure; may explode if heated.

H302 : Harmful if swallowed.

H304 : May be fatal if swallowed and enters airways.

H312 : Harmful in contact with skin.

H315 : Causes skin irritation.

H318 : Causes serious eye damage. H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H335 : May cause respiratory irritation. H336 : May cause drowsiness or dizziness.

H373 : May cause damage to organs through prolonged or repeated

exposure if inhaled.

H373 : May cause damage to organs through prolonged or repeated

exposure if swallowed.

H411 : Toxic to aquatic life with long lasting effects.
H412 : Harmful to aquatic life with long lasting effects.

EUH066 : Repeated exposure may cause skin dryness or cracking.

Full text of other abbreviations



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Note C : Some organic substances may be marketed either in a specif-

ic isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the sub-

stance is a specific isomer or a mixture of isomers.

Note P : The harmonised classification as a carcinogen or mutagen

applies unless it can be shown that the substance contains less than 0,1 % w/w benzene (Einecs No 200-753-7), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P260-P262-P301 +

P310-P331 shall apply.

Note U (table 3.1) : When put on the market gases have to be classified as "Gas-

es under pressure", in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.) Press. Gas (Liq.) Press. Gas (Ref. Liq.) Press. Gas (Diss.) Aerosols shall not be classified as gases under pressure (See Annex I, Part

2, Section 2.3.2.1, Note 2).

2000/39/EC : Europe. Commission Directive 2000/39/EC establishing a first

list of indicative occupational exposure limit values

2019/1831/EU : Europe. Commission Directive 2019/1831/EU establishing a

fifth list of indicative occupational exposure limit values

PL OEL : Poland. Occupational exposure limits for airborne toxic sub-

stances

2000/39/EC / TWA : Limit Value - eight hours 2000/39/EC / STEL : Short term exposure limit 2019/1831/EU / TWA : Limit Value - eight hours 2019/1831/EU / STEL : Short term exposure limit

PL OEL / NDS : Maximal Admissible Concentration

PL OEL / NDSch : Maximal Admissible Temporary Concentration

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air

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Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture:

Aerosol 1 H222, H229 Based on product data or assessment Skin Irrit. 2 H315 Calculation method Eye Dam. 1 H318 Based on product data or assessment STOT SE 3 H336 Calculation method Asp. Tox. 1 H304 Based on product data or assessment Aquatic Chronic 3 H412 Calculation method

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Classification procedure:

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