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

1.1 Product identifier

Product name : OKS 2101

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

Use of the Sub- : Anticorrosion additive

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

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.

Specific target organ toxicity - single ex-

posure, Category 3, Central nervous

system

H336: May cause drowsiness or dizziness.



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

ways.

Long-term (chronic) aquatic hazard, Cat-

egory 2

H411: Toxic to aquatic life with long lasting effects.

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 airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

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.P273 Avoid release to the environment.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON

CENTER/ doctor.

P331 Do NOT induce vomiting.

P391 Collect spillage.

Storage:

P410 + P412 Protect from sunlight. Do not expose to tem-

peratures exceeding 50 °C/ 122 °F.

Hazardous components which must be listed on the label: pentane

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha

Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics

Hydrocarbons, C6, isoalkanes, <5% n-hexane



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Additional Labelling

EUH208 Contains calcium bis(dinonylnaphthalenesulphonate)calcium

bis(dinonylnaphthalenesulphonate); May produce an allergic reaction.

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : Active substance with propellant

Solvent

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concen- tration limit M-Factor Notes	Concentration (% w/w)
pentane	109-66-0 203-692-4 601-006-00-1	Flam. Liq.2; H225 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411		>= 10 - < 20
propane	74-98-6 200-827-9 601-003-00-5	Flam. Gas1A; H220 Press. GasCompr. Gas; H280	Note U (table 3.1)	>= 10 - < 20
Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naph- tha	64742-48-9 265-150-3 649-327-00-6	Flam. Liq.3; H226 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	Note P	>= 2.5 - < 10
Hydrocarbons, C11- C12, isoalkanes, < 2% aromatics	918-167-1	Flam. Liq.3; H226 Asp. Tox.1; H304	Note P	>= 1 - < 10
Hydrocarbons, C6, isoalkanes, <5% n-	931-254-9	Flam. Liq.2; H225 Skin Irrit.2; H315		>= 2.5 - < 10



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hexane		STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411		
isobutane	75-28-5	Flam. Gas1A;		>= 1 - < 10
	200-857-2	H220		
	601-004-00-0	Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	
Naphtha (petroleum),	64742-49-0	Flam. Liq.2; H225		>= 2.5 - < 10
hydrotreated light;	926-605-8	Skin Irrit.2; H315		
Low boiling point hy-		STOT SE3; H336		
drogen treated naph-	649-328-00-1	Asp. Tox.1; H304		
tha		Aquatic Chronic2;		
		H411		
2-butoxyethanol	111-76-2	Acute Tox.4; H302		>= 1 - < 10
-	203-905-0	Acute Tox.4; H332		
		Acute Tox.4; H312		
	603-014-00-0	Skin Irrit.2; H315		
		Eye Irrit.2; H319		
calcium	57855-77-3	Skin Irrit.2; H315		>= 0.1 - < 1
bis(dinonylnaphthalen	260-991-2	Eye Irrit.2; H319		
esulphonate)		Skin Sens.1; H317		
Substances with a work			<u> </u>	
butane	106-97-8	Flam. Gas1A;		>= 30 - < 50
	203-448-7	H220		
		Press. GasCompr.	Note U (table	
	601-004-00-0	Gas; H280	3.1), Note C	
Paraffin waxes and	8002-74-2	Not classified		>= 1 - < 10
Hydrocarbon waxes	232-315-6			

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-



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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.

If eye irritation persists, consult a specialist.

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:

Unconsciousness

Dizziness Drowsiness Headache Nausea Tiredness

Skin contact may provoke the following symptoms:

Erythema

Allergic appearance

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.

May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : The first aid procedure should be established in consultation

with the doctor responsible for industrial medicine.

Treat symptomatically.



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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

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.

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

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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.

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being

used.

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.

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 : BEWARE: Aerosol is pressurized. Keep away from direct sun

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areas and containers 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	Control parameters	Basis		
		of exposure)				
butane	106-97-8	STEL	750 ppm	GB EH40		
			1,810 mg/m3	(2007-08-01)		
	Further inforn	nation: Capable of ca	ausing cancer and/or heritable	e genetic dam-		
	age.					
		TWA	600 ppm	GB EH40		
			1,450 mg/m3	(2007-08-01)		
	Further inforn	nation: Capable of ca	ausing cancer and/or heritable	e genetic dam-		
	age.			_		
pentane	109-66-0	TWA	1,000 ppm	2006/15/EC		
•			3,000 mg/m3	(2006-02-09)		
	Further inforn	Further information: Indicative				
		TWA	600 ppm	GB EH40		
			1,800 mg/m3	(2007-08-01)		
		TWA	1,000 ppm	2006/15/EC		
			3,000 mg/m3	(2006-02-09)		
	Further inforn	nation: Indicative	<u> </u>	,		
Paraffin waxes and	8002-74-2	TWA (Fumes)	2 mg/m3	GB EH40		
Hydrocarbon wax-		, ,		(2011-12-01)		
es						
		STEL (Fumes)	6 mg/m3	GB EH40		
			, and the second	(2011-12-01)		
2-butoxyethanol	111-76-2	TWA	20 ppm	2000/39/EC		
			98 mg/m3	(2000-06-16)		
	Further information: Identifies the possibility of significant uptake through the					
	skin, Indicative			Ü		
	,	STEL	50 ppm	2000/39/EC		
			246 mg/m3	(2000-06-16)		
	Further information: Identifies the possibility of significant uptake through the skin, Indicative					
				3 3		
	·	TWA	25 ppm	GB EH40		
	L	1	11			



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		123 mg/m3	(2020-01-01)
stances are the	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		
	STEL	50 ppm 246 mg/m3	GB EH40 (2020-01-01)
stances are the	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.		
	TWA	20 ppm 98 mg/m3	2000/39/EC (2000-06-16)
	Further information: Identifies the possibility of significant uptake through the skin, Indicative		
	STEL	50 ppm 246 mg/m3	2000/39/EC (2000-06-16)
	Further information: Identifies the possibility of significant uptake through the skin, Indicative		

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
2-butoxyethanol	111-76-2	butoxyacetic acid:	After shift	GB EH40
		240 Millimoles per		BAT
		mole Creatinine		(2011-12-
		(Urine)		18)

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

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
2-butoxyethanol	Workers	Inhalation	Long-term systemic	98 mg/m3
-			effects	_
	Workers	Inhalation	Acute systemic ef-	1091 mg/m3
			fects	
	Workers	Skin contact	Long-term systemic	125 mg/kg
			effects	bw/day
	Workers	Skin contact	Acute systemic ef-	89 mg/kg
			fects	bw/day
	Workers	Inhalation	Acute local effects	246 mg/m3
calcium	Workers	Inhalation	Long-term systemic	2.23 mg/m3
bis(dinonylnaphthalen			effects	
esulphonate)				
	Workers	Skin contact	Long-term systemic	0.32 mg/kg
			effects	

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

Substance name	Environmental Compartment	Value
2-butoxyethanol	Fresh water	8.8 mg/l
	Marine water	0.88 mg/l
	Sewage treatment plant	463 mg/l
	Fresh water sediment	34.6 mg/kg



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	Marine sediment	3.46 mg/kg
	Soil	2.33 mg/kg
	Oral	0.02 mg/kg
calcium	Fresh water	0.27 mg/l
bis(dinonylnaphthalenesulphonat		
e)		
	Marine water	0.027 mg/l
	Intermittent use/release	2.7 mg/l
	Microbiological Activity in Sewage Treat-	10 mg/l
	ment Systems	
	Fresh water sediment	4.69 mg/kg
	Marine sediment	0.469 mg/kg
	Soil	0.936 mg/kg

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 : Safety glasses with side-shields

Hand protection

Material : Nitrile 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.

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

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.

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the spe-

cific work-place.



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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : aerosol

Colour : yellow

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

substance/mixture is non-soluble (in water)

Melting point/range : No data available

Boiling point/boiling range : -161 °C (1,013 hPa)

Flash point : 0 °C

Method: Abel-Pensky

Evaporation rate : No data available

Flammability (solid, gas) : Extremely flammable aerosol.

Upper explosion limit / Upper

flammability limit

9.4 %(V)

Lower explosion limit / Lower :

flammability limit

0.6 %(V)

Vapour pressure : 8,327 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0.638 (20 °C)

Reference substance: Water The value is calculated

Density : 0.64 g/cm3

(20 °C)

Bulk density : No data available

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Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : < 20.5 mm2/s (40 °C)

Explosive properties : Not explosive

Oxidizing properties : No data available

9.2 Other information

Sublimation point : No data available

Metal corrosion rate : Not corrosive to metals

Self-ignition : 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.

10.5 Incompatible materials

Materials to avoid : Oxidizing agents

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10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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: > 5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Calculation method

Remarks: Respiration of solvent vapour may cause dizziness.

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 heavy; Low boiling point ydrogen treated naphtha:

Acute inhalation toxicity : Assessment: The substance or mixture is classified as specific

target organ toxicant, single exposure, category 3 with narcot-

ic effects.

Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

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Method: OECD Test Guideline 402

Hydrocarbons, C6, isoalkanes, <5% n-hexane:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

isobutane:

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

Exposure time: 4 h
Test atmosphere: gas

2-butoxyethanol:

Acute oral toxicity : LD50 (Rat): 1,746 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.

calcium bis(dinonylnaphthalenesulphonate):

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 20,000 mg/kg

butane:

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

Exposure time: 4 h Test atmosphere: gas

Skin corrosion/irritation

Product:

Remarks : Irritating to skin.

Components:

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:

Result : Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics:

Result : Repeated exposure may cause skin dryness or cracking.

Hydrocarbons, C6, isoalkanes, <5% n-hexane:



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Result : Skin irritation

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

Species : Rabbit Result : Skin irritation

2-butoxyethanol:

Species : Rabbit

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

calcium bis(dinonylnaphthalenesulphonate):

Species : Rabbit

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

Serious eye damage/eye irritation

Product:

Remarks : Contact with eyes may cause irritation.

Components:

2-butoxyethanol:

Species : Rabbit

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

calcium bis(dinonylnaphthalenesulphonate):

Species : Rabbit

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

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

2-butoxyethanol:

Test Type : Maximisation Test

Species : Guinea pig

Assessment : Did not cause sensitisation on laboratory animals. Result : Did not cause sensitisation on laboratory animals.



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calcium bis(dinonylnaphthalenesulphonate):

Species : Guinea pig

Assessment : May cause sensitisation by skin contact.
Result : May cause sensitisation by skin contact.

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

2-butoxyethanol:

Germ cell mutagenicity- As-

sessment

: In vitro tests did not show mutagenic effects

Carcinogenicity

Product:

Remarks : No data available

Components:

2-butoxyethanol:

Carcinogenicity - Assess-

ment

Animal testing did not show any carcinogenic effects.

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

: Remarks: No data available

Components:

2-butoxyethanol:

Reproductive toxicity - As-

sessment

No toxicity to reproduction

Animal testing did not show any effects on foetal develop-

ment.

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calcium bis(dinonylnaphthalenesulphonate):

Reproductive toxicity - As-

sessment

: No toxicity to reproduction

STOT - single exposure

Components:

pentane:

Assessment : May cause drowsiness or dizziness.

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:

Exposure routes : Inhalation

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

toxicant, single exposure, category 3 with narcotic effects.

Hydrocarbons, C6, isoalkanes, <5% n-hexane:

Assessment : May cause drowsiness or dizziness.

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

Assessment : May cause drowsiness or dizziness.

2-butoxyethanol:

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

organ toxicant, single exposure.

calcium bis(dinonylnaphthalenesulphonate):

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

organ toxicant, single exposure.

STOT - repeated exposure

Components:

2-butoxyethanol:

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

organ toxicant, repeated exposure.

calcium bis(dinonylnaphthalenesulphonate):

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

organ toxicant, repeated exposure.

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Repeated dose toxicity

Product:

Remarks : This information is not available.

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

May be fatal if swallowed and enters airways.

Components:

pentane:

May be fatal if swallowed and enters airways.

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:

May be fatal if swallowed and enters airways.

Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics:

May be fatal if swallowed and enters airways.

Hydrocarbons, C6, isoalkanes, <5% n-hexane:

May be fatal if swallowed and enters airways.

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

May be fatal if swallowed and enters airways.

2-butoxyethanol:

No aspiration toxicity classification

calcium bis(dinonylnaphthalenesulphonate):

No aspiration toxicity classification

Further information

Product:

Remarks : Ingestion causes irritation of upper respiratory system and

gastrointestinal disturbance.

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Components:

Paraffin waxes and Hydrocarbon waxes:

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: Toxic 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:

pentane:

Ecotoxicology Assessment

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

Naphtha (petroleum), hydrotreated heavy; Low boiling point ydrogen treated naphtha:

Ecotoxicology Assessment

Acute aquatic toxicity : Toxic to aquatic life.

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

Hydrocarbons, C6, isoalkanes, <5% n-hexane:

Toxicity to daphnia and other : E

EC50 (Daphnia magna (Water flea)): > 1 - 10 mg/l

aguatic invertebrates Exposure time: 48 h

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

Ecotoxicology Assessment

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

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2-butoxyethanol:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 1,474 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)): 1,550 mg/l

Exposure time: 48 h Test Type: Immobilization

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 1,840

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to fish (Chronic tox-

icity)

NOEC: > 100 mg/l Exposure time: 21 d

Species: Danio rerio (zebra fish)

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 100 mg/l

Exposure time: 21 d

Species: Daphnia magna (Water flea) Test Type: Reproduction Test Method: OECD Test Guideline 211

calcium bis(dinonylnaphthalenesulphonate):

Toxicity to fish : LC50 (Cyprinus carpio (Carp)): > 0.28 mg/l

Exposure time: 96 h Test Type: static test

Method: OECD Test Guideline 203

Remarks: No toxicity at the limit of solubility

Toxicity to daphnia and other :

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 0.27 mg/l

Exposure time: 48 h Test Type: static test

Method: OECD Test Guideline 202

Remarks: No toxicity at the limit of solubility

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

12.2 Persistence and degradability

Product:

Biodegradability : Remarks: No data available

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Physico-chemical removabil- : Remarks: No data available

ity

Components:

Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics:

Biodegradability : Result: Not readily biodegradable.

Hydrocarbons, C6, isoalkanes, <5% n-hexane:

Biodegradability : Result: Not rapidly biodegradable

2-butoxyethanol:

Biodegradability : Test Type: aerobic

Result: rapidly biodegradable Biodegradation: 90 %

Exposure time: 28 d

Method: OECD Test Guideline 301B

calcium bis(dinonylnaphthalenesulphonate):

Biodegradability : Result: Not readily biodegradable.

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:

propane:

Partition coefficient: n-

log Pow: 2.36

octanol/water

Hydrocarbons, C11-C12, isoalkanes, < 2% aromatics:

Bioaccumulation : Remarks: No data available

Partition coefficient: n-

octanol/water

Remarks: No data available

Hydrocarbons, C6, isoalkanes, <5% n-hexane:

Bioaccumulation : Remarks: No data available

a brand of
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Partition coefficient: n-

octanol/water

log Pow: 4

isobutane:

Partition coefficient: n-

octanol/water

log Pow: 2.88

Method: OECD Test Guideline 107

2-butoxyethanol:

Bioaccumulation : Bioconcentration factor (BCF): 2.5

Partition coefficient: n-

octanol/water

log Pow: 0.81 (25 °C)

Method: OECD Test Guideline 107

calcium bis(dinonylnaphthalenesulphonate):

Partition coefficient: n-

octanol/water

log Pow: 10.96

butane:

Partition coefficient: n-

: log Pow: 2.89

octanol/water

Method: OECD Test Guideline 107

12.4 Mobility in soil

Product:

Mobility : Remarks: No data available

Distribution among environ-

mental compartments

: Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : 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..

Components:

calcium bis(dinonylnaphthalenesulphonate):

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

stance.

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12.6 Other adverse effects

Product:

Endocrine disrupting poten-

tial

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.

Additional ecological infor-

mation

Toxic to aquatic life with long lasting effects.

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

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

14.2 UN proper shipping name



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ADR : AEROSOLS

()

RID : AEROSOLS IMDG : AEROSOLS

(naphtha (petroleum), hydrotreated light, cyclohexane)

IATA : Aerosols, flammable

(naphtha (petroleum), hydrotreated light)

14.3 Transport hazard class(es)

 ADR
 : 2

 RID
 : 2

 IMDG
 : 2.1

 IATA
 : 2.1

14.4 Packing group

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



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ADR

Environmentally hazardous yes

Environmentally hazardous yes

IMDG

Marine pollutant yes

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

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

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, preparations and articles (Annex XVII)

Not applicable

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

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)

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

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

tants (recast)

Not applicable

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

of dangerous chemicals

Not applicable

: P2

P₅c



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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

E2 ENVIRONMENTAL HAZARDS

- Liquefied extremely flammable gases (including LPG) and natural gas
- 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 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)

Volatile organic compounds : Dire

Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 93.32 %

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.

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of R-Phrases

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-



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stance is a specific isomer or a mixture of isomers.

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 % w/w benzene (Einecs No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260- P262-P301 + P310-P331 shall apply. This note applies only to certain complex oil-derived sub-

stances in Part 3.

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).

Full text of H-Statements

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.

H317 : May cause an allergic skin reaction.
H319 : Causes serious eye irritation.

H332 : Harmful if inhaled.

H336 : May cause drowsiness or dizziness.

H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

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 classification as a carcinogen or mutagen need not apply

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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

2006/15/EC : Europe. Indicative occupational exposure limit values

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits
GB EH40 BAT : UK. Biological monitoring guidance values

2000/39/EC / TWA: Limit Value - eight hours2000/39/EC / STEL: Short term exposure limit2006/15/EC / TWA: Limit Value - eight hours

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways: ADR - European 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 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 - (Quanti-



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tative) 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; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Classification of the mixture:

Classification procedure:

Aerosol 1	H222, H229	Based on product data or assessment
Skin Irrit. 2	H315	Calculation method
STOT SE 3	H336	Calculation method
Asp. Tox. 1	H304	Based on product data or assessment
Aquatic Chronic 2	H411	Calculation method

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