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

1.1 Product identifier

Product name : OKS 2501

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

Use of the : Lubricant spray

Substance/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

number

+49 8142 3051 517 (24/7 service)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

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

system

H336: May cause drowsiness or dizziness.



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

airways.

Long-term (chronic) aquatic hazard,

Category 2

H411: Toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

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.

H318 Causes serious eye damage. 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.

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:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

calcium dihydroxide

Additional Labelling

EUH208 Contains Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)]

hydrogen dithiophosphate. 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

Synthetic hydrocarbon oil

solid lubricant

Components

<u> </u>	10.0	Ta:		
Chemical name	CAS-No.	Classification	specific	Concentration
	EC-No.		concentration	(% w/w)
			limit	
	Index-No.		M-Factor	
	Registration number		Notes	
			Acute toxicity	
			estimate	
Hydrocarbons, C6-C7,		Flam. Liq.2; H225	22	>= 30 - < 50
n-alkanes, isoalkanes,	921-024-6	Skin Irrit.2; H315		7-00 (00
cyclics, <5% n-hexane	321 024 0	STOT SE3; H336		
cyclics, <570 H-Hexarie		Asp. Tox.1; H304		
		Aquatic Chronic2;		
		H411		
propane	74-98-6	Flam. Gas1; H220		>= 10 - < 20
	200-827-9	Press. GasCompr.		
		Gas; H280	Note U (table	
	601-003-00-5		3.1)	
calcium dihydroxide	1305-62-0	Skin Irrit.2; H315		>= 3 - < 10
•	215-137-3	Eye Dam.1; H318		



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		STOT SE3; H335		
Amines, N-C16-C18- alkyl-(evennumbered, C18 unsaturated) propane-1,3- diaminium di[(9Z)- octadec-9-enoate]	800-362-7	Skin Irrit.2; H315 Eye Irrit.2; H319 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic2; H411	M-Factor: 10/1	>= 1 - < 2.5
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate	947-946-9	Skin Irrit.2; H315 Skin Sens.1B; H317 Aquatic Chronic4; H413		>= 0.1 - < 0.25
Substances with a work	place exposure limit :			
butane	106-97-8 203-448-7 601-004-00-0	Flam. Gas1; H220 Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	>= 20 - < 30
titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7 236-675-5	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

respiration.

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

Get medical attention immediately if irritation develops and



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persists.

Wash clothing before reuse.

Thoroughly clean shoes before reuse. Wash off immediately with plenty of water.

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.

Call a physician immediately. Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water.

Give small amounts of water to drink.

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.

corrosive effects
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.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : ABC powder

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Unsuitable extinguishing

media

High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Fire Hazard

Do not let product enter drains.

Contains gas under pressure; may explode if heated. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Hazardous combustion

products

Carbon oxides

Nitrogen oxides (NOx) Oxides of phosphorus

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 decomposition 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

respective authorities.

6.3 Methods and material for containment and cleaning up

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

absorbent material, (e.g. sand, earth, diatomaceous earth,

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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

application 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 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

national regulations.

7.3 Specific end use(s)

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

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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	STEL	750 ppm 1,810 mg/m3	GB EH40GB EH40 (2007-08-01)
	Further information: Capable of causing cancer and/or heritable genetic damage.			e genetic
		TWA	600 ppm 1,450 mg/m3	GB EH40GB EH40 (2007-08-01)
	Further information: Capable of causing cancer and/or heritable genetic damage.			e genetic
titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40GB EH40 (2011-12-01)
		TWA (Respirable dust)	4 mg/m3	GB EH40GB EH40 (2011-12-01)
calcium dihydroxide	1305-62-0	TWA	5 mg/m3	GB EH40GB EH40 (2020-01-01)
		TWA (Respirable fraction)	1 mg/m3	GB EH40GB EH40 (2020-01-01)
		STEL (Respirable fraction)	4 mg/m3	GB EH40GB EH40 (2020-01-01)
		TWA (Respirable fraction)	1 mg/m3	2017/164/EU 2017/164/EU (2017-02-01)
	Further information: Indicative			
		STEL (Respirable fraction)	4 mg/m3	2017/164/EU 2017/164/EU (2017-02-01)
	Further information: Indicative			

Derived No Effect Level (DNEL):



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Substance name	End Use	Exposure routes	Potential health effects	Value
Hydrocarbons, C6- C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane	Workers	Skin contact	Long-term systemic effects	773 mg/kg bw/day
	Workers	Inhalation	Long-term systemic effects	2035 mg/m3
Benzene, mono-C10- 13-alkyl derivs., distn. residues	Workers	Inhalation	Long-term systemic effects	2.2 mg/m3
	Workers	Skin contact	Long-term systemic effects	3.15 mg/kg bw/day
calcium dihydroxide	Workers	Inhalation	Long-term local effects	1 mg/m3
	Workers	Inhalation	Acute local effects	4 mg/m3
Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]	Workers	Skin contact	Long-term systemic effects	0.04 mg/kg
	Workers	Inhalation	Long-term systemic effects	0.29 mg/m3
Molybdenum trioxide, reaction products with bis[O,O-bis(2- ethylhexyl)] hydrogen dithiophosphate	Workers	Inhalation	Long-term systemic effects	4.93 mg/m3
	Workers	Dermal	Long-term systemic effects	1.4 mg/kg bw/day

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
Benzene, mono-C10-13-alkyl derivs., distn. residues	Fresh water	0.001 mg/l
	Intermittent use/release	0.001 mg/l
	Marine water	0 mg/l
	Microbiological Activity in Sewage Treatment Systems	2 mg/l
	Fresh water sediment	16.5 mg/kg
	Marine sediment	1.65 mg/kg
	Soil	3.7 mg/kg
calcium dihydroxide	Fresh water	0.49 mg/l
	Marine water	0.32 mg/l
	Intermittent use/release	0.49 mg/l
	Microbiological Activity in Sewage Treatment Systems	3 mg/l
	Soil	1080 mg/kg
Amines, N-C16-C18-alkyl- (evennumbered, C18	Fresh water	0.00638 mg/l

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unsaturated) propane-1,3- diaminium di[(9Z)-octadec-9- enoate]		
	Marine water	0.000638 mg/l
	Intermittent use/release	0.00509 mg/l
	Microbiological Activity in Sewage	98.6 mg/l
	Treatment Systems	
	Fresh water sediment	204 mg/kg
	Marine sediment	20.4 mg/kg
	Soil	9.93 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 : 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.

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

concentration and amount of dangerous substances, and to

the specific work-place.

Respiratory protection : Use respiratory protection unless adequate local exhaust

ventilation 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

Appearance : aerosol

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Colour : white

Odour : solvent-like

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 : -20 °C (1,013 hPa)

Flash point : -20 °C

Method: Abel-Pensky, closed cup

Evaporation rate : No data available

Flammability (solid, gas) : Not applicable

Upper explosion limit / Upper

flammability limit

15 %(V)

Lower explosion limit / Lower :

flammability limit

0.6 %(V)

Vapour pressure : 2,860 hPa (20 °C)

Relative vapour density : No data available

Relative density : 0.775 (20 °C)

Reference substance: Water The value is calculated

Density : 0.78 g/cm3

(20 °C)

Bulk density : No data available

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

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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 : not auto-flammable

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.

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.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : Remarks: Effects due to ingestion may include:

Symptoms: Pain, Central nervous system depression,

Stomach/intestinal disorders

Acute inhalation toxicity : Remarks: Risk of delayed pulmonary oedema.

Effects of breathing high concentrations of vapour may

include:

Respiration of solvent vapour may cause dizziness.

Harmful by inhalation.

Irritating to respiratory system.

Symptoms: Inhalation may provoke the following symptoms:, Respiratory disorder, Dizziness, Drowsiness, Vomiting, Fatigue, Vertigo, Central nervous system depression

Acute dermal toxicity : Symptoms: Blistering, Redness, Local irritation

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Acute oral toxicity : LD50 (Rat): > 5,840 mg/kg

Assessment: The substance or mixture has no acute oral

toxicity

Acute inhalation toxicity : LC50 (Rat): > 25.2 mg/l

Exposure time: 4 h
Test atmosphere: vapour

Assessment: The substance or mixture has no acute

inhalation toxicity

Acute dermal toxicity : LD50 (Rat): > 2.8 g/kg

Assessment: The substance or mixture has no acute dermal

toxicity

calcium dihydroxide:

Acute oral toxicity : LD50 (Rat, female): > 2,000 mg/kg

Method: OECD Test Guideline 425

GLP: yes

Assessment: The substance or mixture has no acute oral

toxicity

Acute inhalation toxicity : LC50 (Rat, male and female): > 6.04 mg/l

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Exposure time: 4 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 436

GLP: yes

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2,500 mg/kg

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

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

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

Acute dermal toxicity : Symptoms: Redness, Local irritation

butane:

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

Exposure time: 4 h Test atmosphere: gas

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

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

Method: OECD Test Guideline 401

GLP: yes

Acute inhalation toxicity : (Rat): > 5.09 mg/l

Method: OECD Test Guideline 403

GLP: no

Skin corrosion/irritation

Product:

Remarks : Causes skin burns.

Irritating to skin.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Species : Rabbit

Assessment : Irritating to skin.

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Method : OECD Test Guideline 404

Result : Irritating to skin.

calcium dihydroxide:

Species : human skin Assessment : Irritating to skin.

Method : OECD Test Guideline 431

Result : Irritating to skin.

GLP : yes

Species : Rabbit

Assessment : Irritating to skin.

Method : OECD Test Guideline 404

Result : Irritating to skin.

GLP : yes

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Species : Rabbit

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

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

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

Remarks : Irritating to skin.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Species : Rabbit

Assessment : No skin irritation

Method : OECD Test Guideline 404

Result : No skin irritation

GLP : no

Serious eye damage/eye irritation

Product:

Remarks : Causes eye burns.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Species : Rabbit

Assessment : No eye irritation Result : No eye irritation



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calcium dihydroxide:

Species : Rabbit

Assessment : Risk of serious damage to eyes.

Method : OECD Test Guideline 405

Result : Risk of serious damage to eyes.

GLP : yes

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Species : Rabbit

Assessment : Irritating to eyes.

Method : OECD Test Guideline 405

Result : Irritating to eyes.

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

Assessment : No eye irritation Result : No eye irritation

titanium dioxide; [in powder form containing <1 $\,\%$ of particles with aerodynamic diameter

≤ 10 µm]:

Species : Rabbit

Assessment : No eye irritation

Method : OECD Test Guideline 405

Result : No eye irritation

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Test Type : Maximisation Test

Exposure routes : Dermal Species : Guinea pig

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 406

Result : Did not cause sensitisation on laboratory animals.

calcium dihydroxide:

Test Type : Local lymph node assay (LLNA)

Species : Mouse

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 429

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Result : Does not cause skin sensitisation.

GLP : yes

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

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

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

Assessment : The product is a skin sensitiser, sub-category 1B. Result : The product is a skin sensitiser, sub-category 1B.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter \leq 10 µm]:

Species : Mouse

Assessment : Does not cause skin sensitisation.

Method : OECD Test Guideline 429

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:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Test system: Rodent cell line Method: OECD Test Guideline 473

Result: negative

calcium dihydroxide:

Genotoxicity in vitro : Test Type: Ames test

Method: OECD Test Guideline 471

Result: negative GLP: yes

Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

GLP: yes

Test Type: In vitro mammalian cell gene mutation test



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Method: OECD Test Guideline 476

Result: negative

GLP: yes

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Genotoxicity in vitro : Test Type: Ames test

Result: negative

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Germ cell mutagenicity-

Assessment

Tests on bacterial or mammalian cell cultures did not show

mutagenic effects.

Carcinogenicity

Product:

Remarks : No data available

Components:

calcium dihydroxide:

Carcinogenicity - Assessment

: No evidence of carcinogenicity in animal studies.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Carcinogenicity - Assessment

: No evidence of carcinogenicity in animal studies.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

Carcinogenicity -

: No evidence of carcinogenicity in animal studies.

Assessment

Reproductive toxicity

Product:

Effects on fertility : Remarks: No data available

Effects on foetal

development

: Remarks: No data available



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Components:

calcium dihydroxide:

Reproductive toxicity - : - Fertility -

Assessment

No toxicity to reproduction

- Teratogenicity -

No effects on or via lactation

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Reproductive toxicity -

Assessment

: - Fertility -

No toxicity to reproduction

- Teratogenicity -

No toxicity to reproduction

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter \leq 10 µm]:

Reproductive toxicity -

Reproductive toxicity -

: - Fertility -

Assessment

No toxicity to reproduction

- Teratogenicity -

No effects on or via lactation

STOT - single exposure

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Assessment : May cause drowsiness or dizziness.

calcium dihydroxide:

Assessment : May cause respiratory irritation.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoatel:

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

organ toxicant, single exposure.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter \leq 10 µm]:

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

organ toxicant, single exposure.

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STOT - repeated exposure

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

Exposure routes : inhalation (vapour)

Assessment : No significant health effects observed in animals at

concentrations of 1 mg/l/6h/d or less.

Amines, N-C16-C18-alkyl-(evennumbered, C18 unsaturated) propane-1,3-diaminium di[(9Z)-octadec-9-enoate]:

Exposure routes : Ingestion

Assessment : May cause damage to organs through prolonged or repeated

exposure.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

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.

Aspiration toxicity

Product:

May be fatal if swallowed and enters airways.

May be fatal if swallowed and enters airways.

Components:

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane:

May be fatal if swallowed and enters airways.

titanium dioxide; [in powder form containing <1 % of particles with aerodynamic diameter ≤ 10 µm]:

No aspiration toxicity classification

Further information

Product:

Remarks : Risks of irreversible effects after a single exposure.

Ingestion causes irritation of upper respiratory system and

gastrointestinal disturbance.

Ingestion causes burns of the upper digestive and respiratory



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tracts.

Components:

Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate:

Remarks : Ingestion causes irritation of upper respiratory system and

gastrointestinal disturbance.

SECTION 12: Ecological information

12.1 Toxicity

Product:

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

adverse effects in the aquatic environment.

Toxicity to daphnia and other : Remarks: No data available

aquatic invertebrates

Toxicity to algae/aquatic

plants

: Remarks: No data available

Toxicity to microorganisms

Remarks: No data available

12.2 Persistence and degradability

Product:

: Remarks: No data available Biodegradability

Physico-chemical

removability

Remarks: No data available

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).

12.4 Mobility in soil

Product:

Mobility Remarks: No data available

Distribution among

environmental compartments

Remarks: No data available



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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.

12.6 Other adverse effects

Product:

Endocrine disrupting

potential

: 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

information

: 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 or ID number



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

14.2 UN proper shipping name

ADR : AEROSOLS
RID : AEROSOLS
IMDG : AEROSOLS

(naphtha (petroleum), hydrotreated light, fatty amine

derivative)

IATA : Aerosols, flammable

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 : 203

(passenger aircraft)

Packing instruction (LQ) : Y203

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Packing group : Not assigned by regulation

Labels : Flammable Gas

14.5 Environmental hazards

ADR

Environmentally hazardous : yes

rid

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 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).

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).

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)

Not applicable

Regulation (EU) 2019/1021 on persistent organic

pollutants (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



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UK REACH List of substances subject to authorisation

(Annex XIV)

(UK. REACH Annex XIV)

GB Export and import of hazardous chemicals - Prior

Informed Consent (PIC) Regulation

(GB PIC)

Regulation (EU) 2019/1148 on the marketing and use of : Not applicable

explosives precursors

Not applicable

Not 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

> specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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

> "Gases 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 (Lig.) Press. Gas (Ref. Lig.) 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.

Highly flammable liquid and vapour. H225

Contains gas under pressure; may explode if heated. H280

May be fatal if swallowed and enters airways. H304

H315 Causes skin irritation.

May cause an allergic skin reaction. H317 Causes serious eye damage. H318 H319 Causes serious eye irritation. May cause respiratory irritation. H335 May cause drowsiness or dizziness. H336

H373 May cause damage to organs through prolonged or repeated

exposure if swallowed.

H400 Very toxic to aquatic life.

Toxic to aquatic life with long lasting effects. H411

H413 May cause long lasting harmful effects to aquatic life.

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Full text of other abbreviations

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

specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.

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

"Gases 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).

2017/164/EU : Europe. Commission Directive 2017/164/EU establishing a

fourth list of indicative occupational exposure limit values

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

2017/164/EU / STEL : Short term exposure limit 2017/164/EU / 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 - 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;

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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; 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	Calculation method
Skin Irrit. 2	H315	Calculation method
Eye Dam. 1	H318	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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