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



**OKS 451** 

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

1.1 Product identifier

Product name : OKS 451

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

Use of the Sub- : Lubricant spray

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- : +34 91 562 04 20

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.

Eye irritation, Category 2 H319: Causes serious eye irritation.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

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

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.

P261 Avoid breathing mist.

P280 Wear protective gloves/ eye protection/ face

protection.

Storage:

P410 + P412 Protect from sunlight. Do not expose to

temperatures exceeding 50 °C/ 122 °F.

### Hazardous components which must be listed on the label:

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

#### 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.



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# **SECTION 3: Composition/information on ingredients**

3.2 Mixtures

Chemical nature : Active substance with propellant

Synthetic hydrocarbon oil

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
Sulfonic acids, petro- leum, calcium salts	61789-86-4 263-093-9 01-2119488992-18- 0000	Skin Sens.1B; H317	>= 10 % Skin Sens.1B,	>= 0,1 - < 1
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate	947-946-9 01-2120772600-59- XXXX	Skin Irrit.2; H315 Skin Sens.1B; H317 Aquatic Chronic4; H413		>= 0,25 - < 1
Substances with a work	place exposure limit :	I		
butane	106-97-8 203-448-7 601-004-00-0	Flam. Gas1A; H220 Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	>= 30 - < 50
propane	74-98-6 200-827-9 601-003-00-5 01-2119486944-21- XXXX	Flam. Gas1A; H220 Press. GasCompr. Gas; H280	Note U (table 3.1)	>= 10 - < 20
isobutane	75-28-5 200-857-2 601-004-00-0 01-2119485395-27- XXXX	Flam. Gas1A; H220 Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	>= 10 - < 20

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For explanation of abbreviations see section 16.

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

If inhaled : 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. Seek medical advice.

If swallowed : Move the victim to fresh air.

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

#### 4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Inhalation may provoke the following symptoms:

Unconsciousness

Dizziness Drowsiness Headache Nausea Tiredness

Allergic appearance

Risks : 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

Nitrogen oxides (NOx)

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.

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 : Try to prevent the material from entering drains or water

courses.

Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages

cannot be contained.



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#### 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 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.



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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	VLA-ED (gas)	1.000 ppm	ES VLA (2013-02-22)
propane	74-98-6	VLA-ED	1.000 ppm	ES VLA (2011-03-03)
isobutane	75-28-5	VLA-ED (gas)	1.000 ppm	ES VLA (2013-02-22)

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

Substance name	End Use	Exposure routes	Potential health effects	Value
Benzene, mono-C10- 13-alkyl derivs., distn. residues	Workers	Inhalation	Long-term systemic effects	3,2 mg/m3
	Workers	Skin contact	Long-term systemic effects	4,3 mg/kg bw/day
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) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Benzene, mono-C10-13-alkyl	Fresh water	0,001 mg/l
derivs., distn. residues		
	Intermittent use/release	0,001 mg/l
	Marine water	0 mg/l
	Microbiological Activity in Sewage Treat-	2 mg/l
	ment Systems	
	Fresh water sediment	1,65 mg/kg
	Marine sediment	0,165 mg/kg
	Soil	0,329 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).



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Personal protective equipment

Eye protection : Safety glasses with side-shields

Hand protection

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

Remarks : For prolonged or repeated contact use 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.

## **SECTION 9: Physical and chemical properties**

## 9.1 Information on basic physical and chemical properties

Physical state : aerosol

Colour : brown

Odour : characteristic

Odour Threshold : No data available

Melting point/range : No data available

Boiling point/boiling range : -42 °C (1.013 hPa)

Flammability (solid, gas) : Extremely flammable aerosol.

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Upper explosion limit / Upper

flammability limit

10,9 %(V)

Lower explosion limit / Lower

flammability limit

1,5 %(V)

Flash point : -60 °C

Method: DIN 51755, closed cup

Auto-ignition temperature : > 350 °C

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)

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Vapour pressure : 3.000 hPa (20 °C)

Relative density : 0,67 (20 °C)

Reference substance: Water The value is calculated

Density : 0,67 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 : not auto-flammable

Metal corrosion rate : Not corrosive to metals

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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.

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 : Remarks: This information is not available.

Acute inhalation toxicity : Symptoms: Inhalation may provoke the following symptoms:,

Respiratory disorder

Acute dermal toxicity : Symptoms: Redness, Local irritation

### **Components:**

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

Acute dermal toxicity : Symptoms: Redness, Local irritation



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butane:

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

Exposure time: 4 h Test atmosphere: gas

isobutane:

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

Exposure time: 4 h Test atmosphere: gas

Skin corrosion/irritation

**Product:** 

Remarks : This information is not available.

**Components:** 

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

phosphate:

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

Remarks : Irritating to skin.

Serious eye damage/eye irritation

**Product:** 

Result : Eye irritation

Remarks : Irritating to eyes.

**Components:** 

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

phosphate:

Assessment : No eye irritation Result : No eye irritation

Respiratory or skin sensitisation

Product:

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

**Components:** 

Sulfonic acids, petroleum, calcium salts:

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

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

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

Germ cell mutagenicity

Product:

Genotoxicity in vitro : Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Carcinogenicity

**Product:** 

Remarks : No data available

Reproductive toxicity

**Product:** 

Effects on fertility : Remarks: No data available

Effects on foetal develop-

ment

Remarks: No data available

Repeated dose toxicity

**Product:** 

Remarks : This information is not available.

**Aspiration toxicity** 

**Product:** 

This information is not available.

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.

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#### **Further information**

**Product:** 

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

the toxicology of similar products.

**Components:** 

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

phosphate:

Remarks : Ingestion causes irritation of upper respiratory system and

gastrointestinal disturbance.

## **SECTION 12: Ecological information**

## 12.1 Toxicity

**Product:** 

Toxicity to fish : Remarks: No data available

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:**

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

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

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

Method: OECD Test Guideline 203

GLP: yes

Remarks: May cause long-term adverse effects in the aquatic

environment.

Toxicity to daphnia and other :

aquatic invertebrates

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

Exposure time: 48 h Test Type: static test

rest Type, static test

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100

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plants mg/l

> Exposure time: 72 h Test Type: static test

Method: OECD Test Guideline 201

GLP: yes

12.2 Persistence and degradability

**Product:** 

Biodegradability Remarks: No data available

ity

Physico-chemical removabil- : Remarks: No data available

Components:

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

phosphate:

Biodegradability Result: Not rapidly biodegradable

Biodegradation: 11 % Exposure time: 28 d

Method: OECD Test Guideline 301B

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:

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

Partition coefficient: n-

octanol/water

log Pow: > 4

butane:

Partition coefficient: nlog Pow: 2,89

octanol/water Method: OECD Test Guideline 107

propane:

Partition coefficient: n-

log Pow: 2,36

octanol/water

isobutane:

Partition coefficient: nlog Pow: 2,88

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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.

## 12.6 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.

# 12.7 Other adverse effects

**Product:** 

Additional ecological infor-

mation

No information on ecology is available.

## **Components:**

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

Additional ecological infor-

mation

May cause long lasting harmful effects to aquatic life.

### **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.

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



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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

 ADR
 : UN 1950

 RID
 : UN 1950

 IMDG
 : UN 1950

 IATA
 : UN 1950

## 14.2 UN proper shipping name

ADR : AEROSOLS
RID : AEROSOLS
IMDG : AEROSOLS

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



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: 2.1 Labels

**IMDG** 

Packing group Not assigned by regulation

Labels **EmS Code** F-D, S-U

IATA (Cargo)

Packing instruction (cargo 203

aircraft)

Packing instruction (LQ) Y203

Not assigned by regulation Packing group

Labels Flammable Gas

IATA (Passenger)

Packing instruction (passen-203

ger aircraft)

Packing instruction (LQ) Y203

Packing group Not assigned by regulation

Flammable Gas Labels

14.5 Environmental hazards

Environmentally hazardous no

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 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)



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



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(EU. REACH-Annex XIV)

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

plete the ozone layer (EC 1005/2009)

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

tants (recast) (EU POP)

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

of dangerous chemicals

(EU PIC)

Not applicable

Not applicable

Not applicable

: P2

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

Liquefied extremely flammable gases (including LPG) and natu-

ral 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: 55,16 %

#### Other regulations:

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 H-Statements**

H220 : Extremely flammable gas.

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

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H413 : May cause long lasting harmful effects to aquatic life.

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



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#### 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 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).

ES VLA : Spain. Environmental Limits for exposure to Chemical agents

- Table 1: Occupational Exposure Values

ES VLA / VLA-ED : Environmental Daily Limit Value

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; 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 -

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



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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: Classification procedure:

Aerosol 1 H222, H229 Based on product data or assessment Eye Irrit. 2 H319 Based on product data or assessment Skin Sens. 1 H317 Based on product data or assessment

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