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



**OKS 451** 

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

# 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: +49 8142 3051 517

ber Warszawa: +48 22 619 66 54

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

# Classification (REGULATION (EC) No 1272/2008)

Aerosols, Category 1 H222: Extremely flammable aerosol.

H229: Pressurised container: May burst if heated.

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

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

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



# **OKS 451**

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

#### 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.



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



**OKS 451** 

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

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

3.2 Mixtures

Chemical nature : Active substance with propellant

Synthetic hydrocarbon oil

Components

Components				
Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concentration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
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
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 :	•		
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

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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

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.



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

# **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.



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

#### 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.



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

7.3 Specific end use(s)

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

# **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
butane	106-97-8	NDS	1.900 mg/m3	PL OEL (2018-07-07)
		NDSch	3.000 mg/m3	PL OEL (2018-07-07)
propane	74-98-6	NDS	1.800 mg/m3	PL OEL (2018-07-07)
Molybdenum trioxide, reaction products with bis[O,O-bis(2-ethylhexyl)] hydrogen dithiophosphate	Not As- signed	NDS	4 mg/m3 (Molybdenum)	PL OEL (2018-07-07)
		NDSch	10 mg/m3 (Molybdenum)	PL OEL (2018-07-07)

# 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 derivs., distn. residues	Fresh water	0,001 mg/l
denvs., distri. 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



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



# **OKS 451**

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

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).

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

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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

Melting point/range : No data available

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

Flammability (solid, gas) Extremely flammable aerosol.

Upper explosion limit / Upper

flammability limit

10,9 %(V)

Lower explosion limit / Lower : 1,5 %(V)

flammability limit

Flash point -60 °C

Method: DIN 51755, closed cup

: > 350 °C Auto-ignition temperature

Decomposition temperature No data available

pΗ 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

3.000 hPa (20 °C) Vapour pressure

Relative density 0,67 (20 °C)

> Reference substance: Water The value is calculated

0,67 g/cm3 Density

(20 °C)

: No data available Bulk density

Relative vapour density No data available

#### 9.2 Other information

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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

Explosives : Not explosive

Oxidizing properties : No data available

Self-ignition : not auto-flammable

Metal corrosion rate : Not corrosive to metals

Evaporation rate : No data available

Sublimation point : No data available

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No hazards to be specially mentioned.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

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



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



**OKS 451** 

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

# **Components:**

isobutane:

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

Exposure time: 4 h
Test atmosphere: gas

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

Acute dermal toxicity : Symptoms: Redness, Local irritation

butane:

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



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



**OKS 451** 

 Version
 Revision Date:
 Date of last issue: 16.03.2022
 Print Date:

 4.1
 20.04.2022
 Date of first issue: 09.07.2016
 22.04.2022

# 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:

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.

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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

**Product:** 

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

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

levels of 0.1% or higher.

**Further information** 

**Product:** 

Remarks : 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

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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

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

Method: OECD Test Guideline 202

GLP: yes

Toxicity to algae/aquatic

plants

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

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

Physico-chemical removabil- : Remarks: No data available

ity

#### Components:

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

Biodegradability Result: Not rapidly biodegradable

> Biodegradation: 11 % Exposure time: 28 d

Method: OECD Test Guideline 301B

# 12.3 Bioaccumulative potential

**Product:** 

Remarks: This mixture contains no substance considered to Bioaccumulation

be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very

persistent and very bioaccumulating (vPvB).

# Components:

isobutane:

Partition coefficient: nlog Pow: 2,88

Method: OECD Test Guideline 107 octanol/water

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



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

Partition coefficient: n-

octanol/water

log Pow: > 4

butane:

Partition coefficient: n-

log Pow: 2,89 octanol/water

Method: OECD Test Guideline 107

propane:

Partition coefficient: n-

octanol/water

log Pow: 2,36

# 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 dithiophosphate:

Additional ecological infor-

mation

: May cause long lasting harmful effects to aquatic life.



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.

Dispose of as hazardous waste in compliance with local and

national regulations.

Waste codes should be assigned by the user based on the

application for which the product was used.

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

the unused product.

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

The following Waste Codes are only suggestions:

Waste Code : unused product, packagings not completely emptied

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

containing hazardous substances

# **SECTION 14: Transport information**

## 14.1 UN number or ID number

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

#### 14.2 UN proper shipping name

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

IATA : Aerosols, flammable

## 14.3 Transport hazard class(es)

ADN : 2
ADR : 2
RID : 2



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

IMDG : 2.1
IATA : 2.1

14.4 Packing group

**ADN** 

Packing group : Not assigned by regulation

Classification Code : 5F Labels : 2.1

**ADR** 

Packing group : Not assigned by regulation

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

**RID** 

Packing group : Not assigned by regulation

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

**IMDG** 

Packing group : Not assigned by regulation

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

IATA (Cargo)

Packing instruction (cargo : 203

aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

IATA (Passenger)

Packing instruction (passen: 203

ger aircraft)

Packing instruction (LQ) : Y203

Packing group : Not assigned by regulation

Labels : Flammable Gas

14.5 Environmental hazards

ADN

Environmentally hazardous : no

**ADR** 

Environmentally hazardous : no

RID

Environmentally hazardous : no

**IMDG** 

Marine pollutant : no

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



**OKS 451** 

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

# 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)

(EU. REACH-Annex XIV)

Not applicable

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

(EC 1005/2009)

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

tants (recast) (EU POP) : Not applicable

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

(EU PIC)

Not applicable

: P2

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 natural gas



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



# **OKS 451**

VersionRevision Date:Date of last issue: 16.03.2022Print Date:4.120.04.2022Date of first issue: 09.07.201622.04.2022

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.

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

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

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

Commission Regulation (EU) 2020/878

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

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

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

Act of 13 June 2013. On packaging and packaging waste Journal. U. of 2013. Item. 888, as amended).

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

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

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

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

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

Ordinance of the Minister of Health of 11th June 2012 concerning categories of dangerous



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 4.1 20.04.2022 Date of first issue: 09.07.2016 22.04.2022

substances and dangerous mixtures for which containers must be fitted with child-resistant fastenings and a tactile warning of danger (Dz. U. from 2012, item 688 as amended).

## 15.2 Chemical safety assessment

This information is not available.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

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.

#### 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).

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

stances

PL OEL / NDS : Maximal Admissible Concentration

PL OEL / NDSch : Maximal Admissible Temporary Concentration

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



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



**OKS 451** 

Version Revision Date: Date of last issue: 16.03.2022 Print Date: 20.04.2022 Date of first issue: 09.07.2016 22.04.2022 4.1

boratory 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 -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

This safety data sheet applies only to products as originally packed and labelled. The information contained therein may not be reproduced or modified without our express written permission. Any forwarding of this document is only permitted to the extent required by law. Any further, in particular public, dissemination of the safety data sheet (e.g. as a document for download from the Internet) is not permitted without our express written consent. We provide our customers with amended safety data sheets as prescribed by law. The customer is responsible for passing on safety data sheets and any amendments contained therein to its own customers, employees and other users of the product. We provide no guarantee that safety data sheets received by users from third parties are up-to-date. All information and instructions in this safety data sheet have been compiled to the best of our knowledge and are based on the information available to us on the day of publication. The information provided is intended to describe the product in relation to the required safety measures; it is neither an assurance of characteristics nor a guarantee of the product's suitability for particular applications and does not justify any contractual legal relationship. The existence of a safety data sheet for a particular jurisdiction does not necessarily mean that import or use within that jurisdiction is legally permitted. If you have any questions, please contact your responsible sales contact or authorized trading partner.

