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

1.1 Product identifier	
Product name :	OKS 481
1.2 Relevant identified uses of the	substance or mixture and uses advised against
Use of the Sub- : stance/Mixture	Lubricant spray
Recommended restrictions : on use	Restricted to professional users.
1.3 Details of the supplier of the sa	ifety 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 : responsible for the SDS	mcm@oks-germany.com Material Compliance Management
National contact :	EagleBurgmann Hungaria Kft. Népfürdő utca 22 1138 Budapest Hungary Tel.: +36 1 814 8160 Fax: +36 1 319 8125 info.hu@eagleburgmann.com
1.4 Emergency telephone number	
Emergency telephone num- :	0049 (0) 8142-3051-517

Emergency telephone num-	:	0049 (0) 8142-3051-517
ber		Egészségügyi Toxikológiai Tájékoztató Szolgálat (ETTSZ)
		H-1096 Budapest, Nagyvárad tér 2.
		Tel: +36 1 476 6464, +36 80 201 199

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)



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Aero	osols, Category 1		H222: Extremely flam H229: Pressurised co	mable aerosol. ntainer: May burst if heated.
Specific target organ toxicity - single ex- posure, Category 3, Central nervous system			H336: May cause drov	wsiness or dizziness.
Aspiration hazard, Category 1		H304: May be fatal if s ways.	swallowed and enters air-	
Long egor	g-term (chronic) aquat y 2	ic hazard, Cat-	H411: Toxic to aquation	c life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) Hazard pictograms :				
Signal word	:	Danger		
Hazard statements	:	H222 H229 H304 H336 H411	Extremely flammable aerosol. Pressurised container: May burst if heated. May be fatal if swallowed and enters air- ways. May cause drowsiness or dizziness. Toxic to aquatic life with long lasting effects.	
Supplemental Hazard Statements	:	EUH066	Repeated exposure may cause skin dryness or cracking.	
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 P273	Do not pierce or burn, even after use. Avoid release to the environment.	
		Response:		
		P301 + P310	IF SWALLOWED: 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.	

Hazardous components which must be listed on the label:



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pentane

2.3 Other hazards

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

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

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature

: Active agent with propellant and solvent.

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	specific concen- tration limit M-Factor Notes Acute toxicity estimate	Concentration (% w/w)
pentane	109-66-0 203-692-4 601-006-00-1 01-2119459286-30- XXXX	Flam. Liq.2; H225 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic2; H411; EUH066	Note C	>= 50 - < 70
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)	>= 1 - < 10
isobutane	75-28-5 200-857-2 601-004-00-0 01-2119485395-27-	Flam. Gas1A; H220 Press. GasCompr. Gas; H280	Note U (table 3.1), Note C	>= 1 - < 10



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zinc oxide	1314-13-2 215-222-5 030-013-00-7 01-2119463881-32- XXXX	Aquatic Acute1; H400 Aquatic Chronic1; H410	M-Factor: 1/1	>= 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	>= 10 - < 20

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled :	Call a physician or poison control centre immediately. Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If unconscious, place in recovery position and seek medical advice. Keep respiratory tract clear. If breathing is irregular or stopped, administer artificial respira- tion.
In case of skin contact :	Take off all contaminated clothing immediately. Get medical attention immediately if irritation develops and persists. Wash clothing before reuse. Thoroughly clean shoes before reuse. Wash skin thoroughly with soap and water or use recognized skin cleanser.
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. If accidentally swallowed obtain immediate medical attention. Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water. Aspiration hazard if swallowed - can enter lungs and cause damage.



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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 Aspiration may cause pulmonary oedema and pneumonitis.Risks:Central nervous system depression Can be absorbed through skin. Risk of product entering the lungs on vomiting after ingestion. Health injuries may be delayed.	• • •	•
Risks : Central nervous system depression Can be absorbed through skin. Risk of product entering the lungs on vomiting after ingestion.	Symptoms	Unconsciousness Dizziness Drowsiness Headache Nausea Tiredness Skin contact may provoke the following symptoms: Erythema
	Risks	: Central nervous system depression Can be absorbed through skin.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1	Extinguishing media		
	Suitable extinguishing media	:	ABC powder
	Unsuitable extinguishing media	:	High volume water jet
5.2	Special hazards arising from	the	substance or mixture
	Specific hazards during fire- fighting	:	Fire Hazard Do not let product enter drains. Contains gas under pressure; may explode if heated. Beware of vapours accumulating to form explosive concentra- tions. Vapours can accumulate in low areas.
	Hazardous combustion prod- ucts	:	Carbon oxides
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



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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 ab- sorbent material, (e.g. sand, earth, diatomaceous earth, ver- miculite) and place in container for disposal according to local / national regulations (see section 13). Keep in suitable, closed containers for disposal. Non-sparking tools should be used.
---------------------------	---

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling	 Do not use in areas without adequate ventilation. Do not breathe vapours or spray mist.
	In case of insufficient ventilation, wear suitable respiratory equipment.
	Avoid contact with skin and eyes.
	For personal protection see section 8.
	Keep away from fire, sparks and heated surfaces.
	Smoking, eating and drinking should be prohibited in the application area.
	Wash hands and face before breaks and immediately after handling the product.



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			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 en may still contain product residues. Pressurized container: protect from sunli pose to temperatures exceeding 50 °C. If even after use.	ght and do not ex-
Hygi	ene measures	:	Wash face, hands and any exposed skin handling.	thoroughly after
7.2 Cond	itions for safe storage	e, inc	luding any incompatibilities	
Requirements for storage areas and containers		:	BEWARE: Aerosol is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Store in accordance with the particular na- tional regulations.	
-	fic end use(s) ific use(s)	:	Specific instructions for handling, not req	uired.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis	
pentane	109-66-0	TWA	1.000 ppm	2006/15/EC	
			3.000 mg/m3	(2006-02-09)	
	Further inform	nation: Indicative	·		
		TWA	2.950 mg/m3	HU OEL	
				(2020-02-06)	
	Further inform	nation: Substances v	vhich have a health hazard c	lue to SHORT	
	exposure. Co	rrected value = TW/	A x 8 / number of hours per o	day, Value dis-	
	closed in Dire	ctive 2006/15/EC			
butane	106-97-8	TWA	2.350 mg/m3	HU OEL	
			_	(2020-02-06)	
	Further inform	nation: Irritants, simp	le suffocation gases, substa	nces with minor	
	health effects	. No correction is rec	quired.		
		CEIL	9.400 mg/m3	HU OEL	
				(2020-02-06)	
	Further information: Irritants, simple suffocation gases, substances with minor				
	health effects	health effects. No correction is required.			
zinc oxide	1314-13-2	TWA (Dust)	5 mg/m3	HU OEL	
				(2020-02-06)	



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exposure		VA x 8 / number of h	n hazard due to SHORT ours per day, Irritant sub- I the eyes or all three)	
	TWA (Fumes)	5 mg/m3	HU OEL (2020-02-06)	
exposure	Further information: Substances which have a health hazard due to SHORT exposure. Corrected value = TWA x 8 / number of hours per day, Irritant sub- stance (irritates the skin, the mucous membrane and the eyes or all three)			

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

		• •		
Substance name	End Use	Exposure routes	Potential health ef- fects	Value
pentane	Workers	Inhalation	Long-term systemic effects	3000 mg/m3
	Workers	Dermal	Long-term systemic effects	432 mg/kg bw/day
zinc oxide	Workers	Inhalation	Long-term systemic effects	5 mg/m3
	Workers	Inhalation	Long-term local ef- fects	0,5 mg/m3
	Workers	Skin contact	Long-term systemic effects	83 mg/kg

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

Substance name	Environmental Compartment	Value
pentane	Fresh water	0,230 mg/l
	Marine water	0,230 mg/l
	Microbiological Activity in Sewage Treat-	3,6 mg/l
	ment Systems	
	Fresh water sediment	1,2 mg/kg
	Marine sediment	1,2 mg/kg
zinc oxide	Fresh water	0,0206 mg/l
	Marine water	0,0061 mg/l
	Microbiological Activity in Sewage Treat-	0,100 mg/l
	ment Systems	
	Fresh water sediment	117,8 mg/kg
	Marine sediment	56,5 mg/kg
	Soil	35,6 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 Break through time Protective index	:	Nitrile rubber > 10 min Class 1



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F	Remarks	:	Wear protective gloves. The break throu amongst other things on the material, the type of glove and therefore has to be m case. The selected protective gloves have to tions of Regulation (EU) 2016/425 and the derived from it.	e thickness and the easured for each satisfy the specifica-
Skin	and body protection	:	Choose body protection in relation to its tration and amount of dangerous substaction work-place.	
Res	piratory protection	:	Use respiratory protection unless adeque tilation is provided or exposure assessin exposures are within recommended exp Short term only	nent demonstrates that
F	ilter type	:	Filter type A-P	
Prot	ective measures	:	The type of protective equipment must to the concentration and amount of the at the specific workplace.	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state		aerosol
Colour	:	beige
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.
Upper explosion limit / Upper flammability limit	:	10,9 %(V)
Lower explosion limit / Lower flammability limit	:	1,4 %(V)
Flash point	:	-60 °C



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				Method: Abe	I-Pensky	
,	Auto-ig	nition temperature	:	No data avai	lable	
I	Decom	position temperature	:	No data avai	lable	
ł	pН		:	Not applicab substance/m	le ixture is non-soluble	e (in water)
v	Viscosi [.] Visc	ty :osity, dynamic	:	No data avai	lable	
		osity, kinematic	:	< 20,5 mm2/	s (40 °C)	
:	Solubili Wat	ty(ies) er solubility	:	insoluble		
	Solu	bility in other solvents	:	No data avai	lable	
	Partitio octanol	n coefficient: n- /water	:	No data avai	lable	
v	Vapour	pressure	:	2.000 hPa (2	0 °C)	
I	Relative	e density	:	0,65 (20 °C) Reference su The value is	ubstance: Water calculated	
I	Density	,	:	0,65 g/cm3 (20 °C)		
I	Bulk de	ensity	:	No data avai	lable	
I	Relative	e vapour density	:	No data avai	lable	
9.2 O	Other in	formation				
I	Explosi	ves	:	Not explosive	9	
(Oxidizir	ng properties	:	No data avai	lable	
:	Self-ign	ition	:	not auto-flam	imable	
I	Metal c	orrosion rate	:	Not corrosive	e to metals	
I	Evapor	ation rate	:	No data avai	lable	
;	Sublima	ation point	:	No data avai	lable	



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SECTION	SECTION 10: Stability and reactivity						

: No dangerous reaction known under conditions of normal use.

10.1 Reactivity

No hazards to be specially mentioned.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

10.4 Conditions	s to avoid	

Hazardous reactions

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: Effects due to ingestion may include:
	Symptoms: Central nervous system depression
Acute inhalation toxicity :	Remarks: Respiration of solvent vapour may cause dizziness.
	Symptoms: Inhalation may provoke the following symptoms:, Respiratory disorder, Dizziness, Drowsiness, Vomiting, Fa- tigue, Vertigo, Central nervous system depression
Acute dermal toxicity :	Remarks: Prolonged or repeated skin contact with liquid may cause defatting resulting in drying, redness and possible blistering.
	Symptoms: Skin disorders
Components:	

Components:

pentane:



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ersion 1	Revision Date: 16.09.2022		e of last issue: 23.01.2019 e of first issue: 07.06.2016	Print Date: 16.09.2022
Acute	oral toxicity	:	LD50 (Rat): > 2.000 mg/kg	
Acute	inhalation toxicity	:	LC50 (Rat): > 25,3 mg/l Exposure time: 4 h Test atmosphere: vapour Assessment: The substance or r tion toxicity	nixture has no acute inhala-
isobu	tane:			
Acute	inhalation toxicity	:	LC50 (Rat): 658 mg/l Exposure time: 4 h Test atmosphere: gas	
zinc c	oxide:			
Acute	oral toxicity	:	LD50 (Rat): > 5.000 mg/kg Method: OECD Test Guideline 4	01
Acute	inhalation toxicity	:	LC50 (Rat): > 5,7 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 4 Assessment: The substance or r tion toxicity	
Acute	dermal toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 4 GLP: yes Assessment: The substance or r toxicity	
butan	le:			
Acute	inhalation toxicity	:	LC50 (Rat): 658 mg/l Exposure time: 4 h Test atmosphere: gas	
Skin d	corrosion/irritation			
<u>Produ</u>	<u>ict:</u>			
Rema	irks	:	This information is not available.	
<u>Comp</u>	oonents:			
penta	ne:			
Resul	t	:	Repeated exposure may cause	skin dryness or cracking.
zinc c	oxide:			
Specie		:	Rabbit	
Asses Metho	ssment od	:	No skin irritation OECD Test Guideline 404	



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sion Revision Date: 16.09.2022	Date of last issue: 23.01.2019 Date of first issue: 07.06.2016	Print Date: 16.09.2022
Result	: No skin irritation	
Serious eye damage/e	ye irritation	
Product:		
Remarks	: Irritating to eyes.	
Components:		
pentane:		
Species	: Rabbit	
Assessment	: No eye irritation	
Result	: No eye irritation	
zinc oxide:		
Species	: Rabbit	
Assessment	: No eye irritation	
Method Result	: OECD Test Guideline 405 : No eye irritation	
GLP	: yes	
<u>Product:</u> Remarks	: This information is not available.	
Components:		
pentane:		
Species	: Guinea pig	
Assessment	: Does not cause skin sensitisation.	
Method Result	: OECD Test Guideline 406 : Does not cause skin sensitisation.	
GLP	: yes	
zinc oxide:		
Test Type	: Maximisation Test	
Species	: Guinea pig	
Assessment	: Does not cause skin sensitisation.	
Method	: OECD Test Guideline 406	
Result GLP	Does not cause skin sensitisation.yes	
Germ cell mutagenicit	v	
_	y	
Product:		
Genotoxicity in vitro	: Remarks: No data available	
		a brand of



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Geno	toxicity in vivo	:	Remarks: No data available	
Com	nononto.			
	ponents:			
	oxide: n cell mutagenicity- As- ment	:	Tests on bacterial or mammalian mutagenic effects.	cell cultures did not show
Carci	inogenicity			
<u>Prod</u> Rema		:	No data available	
Com	ponents:			
-	oxide: nogenicity - Assess-	:	Not classifiable as a human carci	nogen.
Repr	oductive toxicity			
Prod Effec	uct: ts on fertility	:	Remarks: No data available	
Effect ment	ts on foetal develop-	:	Remarks: No data available	
Com	ponents:			
zinc	oxide:			
•	oductive toxicity - As-	:	- Fertility -	
sessr	nent		No toxicity to reproduction - Teratogenicity -	
			No toxicity to reproduction	
STO	Γ - single exposure			
Com	ponents:			
penta	ane:			
Targe	sure routes et Organs ssment	:	Inhalation Central nervous system, Narcotic May cause drowsiness or dizzines ture is classified as specific target sure, category 3 with narcotic effe	ss., The substance or mix- t organ toxicant, single exp



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	•			
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Asse	Assessment		The substance or mixture is not cl organ toxicant, single exposure.	assified as specific target
STO	T - repeated exposur	re		
<u>Com</u>	ponents:			
zinc	oxide:			
Asse	ssment	:	The substance or mixture is not cl organ toxicant, repeated exposure	
Repe	eated dose toxicity			
Prod	uct:			
Rem	arks	:	This information is not available.	
Aspi	ration toxicity			
Prod	uct:			
	be fatal if swallowed a	and ente	ers airways.	
Com	ponents:			
penta	ane.			
•	be fatal if swallowed a	and ente	ers airways.	
zinc	oxide:			
No a	spiration toxicity class	ification		
1.2 Infor	mation on other haz	ards		
Endo	ocrine disrupting pro	operties		
Prod	uct:			
Asse	ssment	:	The substance/mixture does not c ered to have endocrine disrupting REACH Article 57(f) or Commissio (EU) 2017/2100 or Commission R levels of 0.1% or higher.	properties according to on Delegated regulation
Furth	ner information			
Prod	uct:			
Rema		:	Information given is based on data the toxicology of similar products.	a on the components and



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SECTION 12: Ecological information

12.1 Toxicity

<u>Product:</u> Toxicity to fish	:	Remarks: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Toxicity to daphnia and other	:	·
aquatic invertebrates Toxicity to algae/aquatic	:	Remarks: No data available
plants Toxicity to microorganisms	:	Remarks: No data available
Components:		
pentane:		
Ecotoxicology Assessment		
Chronic aquatic toxicity	:	Toxic to aquatic life with long lasting effects.
zinc oxide:		
Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): 1,55 mg/l Exposure time: 96 h Test Type: static test
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): 1 mg/l Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): 0,136 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201 GLP: yes
M-Factor (Acute aquatic tox- icity)	:	1
Toxicity to microorganisms	:	EC50 (activated sludge): > 1.000 mg/l Exposure time: 3 h Method: OECD Test Guideline 209 GLP: yes
Toxicity to daphnia and other aquatic invertebrates (Chron-	:	0,04 mg/l Exposure time: 21 d



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i	ic toxici	ty)		Species: Daphnia magna (Water flea) Test Type: semi-static test Method: OECD Test Guideline 211	
	M-Factor toxicity)	or (Chronic aquatic	:	1	
12.2	Persis	tence and degradabi	ility		
<u> </u>	Produc	<u>:t:</u>			
I	Biodeg	radability	:	Remarks: No data available	
	Physico ity	o-chemical removabil-	:	Remarks: No data available	
<u>(</u>	Compo	onents:			
	pentan Biodeg	e: radability	:	Test Type: aerobic	
				Inoculum: activated sludge Result: rapidly biodegradable Biodegradation: 87 % Method: OECD Test Guideline 301F GLP: yes	
:	zinc ox	kide:			
I	Biodeg	radability	:	Remarks: The methods for determining not applicable to inorganic substances.	biodegradability are
12.3	Bioaco	umulative potential			
<u> </u>	Produc	<u>:t:</u>			
I	Bioaccu	umulation	:	Remarks: This mixture contains no subs be persistent, bioaccumulating and toxic This mixture contains no substance con persistent and very bioaccumulating (vP	c (PBT). sidered to be very
<u>(</u>	Compo	onents:			
I	propan	ie:			
	Partitio octanol	n coefficient: n- /water	:	log Pow: 2,36	
i	isobuta	ane:			
	Partitio octanol	n coefficient: n- /water	:	log Pow: 2,88 Method: OECD Test Guideline 107	
I	butane	:			



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	ion coefficient: n- nol/water	:	log Pow: 2,89 Method: OECD Test Guideline 107		
12.4 Mob	ility in soil				
Prod					
Mobi	lity	:	Remarks: No data available		
	bution among environ- al compartments	:	Remarks: No data available		
12.5 Resı	Ilts of PBT and vPvB a	asses	sment		
Prod	uct:				
Asse	ssment	:	This substance/mixture contains no to be either persistent, bioaccumula very persistent and very bioaccumu 0.1% or higher.	tive and toxic (PBT), or	
<u>Com</u>	ponents:				
zinc	oxide:				
Asse	Assessment		Remarks: Not applicable		
12.6 Endo	ocrine disrupting prop	oertie	5		
<u>Prod</u>	uct:				
Asse	ssment	:	The substance/mixture does not con ered to have endocrine disrupting p REACH Article 57(f) or Commission (EU) 2017/2100 or Commission Reg levels of 0.1% or higher.	roperties according to Delegated regulation	
12.7 Othe	er adverse effects				
Prod	uct:				
Addit matic	ional ecological infor- on	:	Toxic to aquatic life with long lasting	g effects.	
	N 13: Disposal cons				

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



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		application for which the produ	uct was used.
Contaminated packaging		the unused product. Offer empty spray cans to an e	emptied must be disposed of as established disposal company. pierce or burn, even after use.
		The following Waste Codes ar	e only suggestions:
Wast	e Code	 unused product, packagings n 16 05 04*, gases in pressure o containing hazardous substan 	containers (including halons)

SECTION 14: Transport information

14.1 UN number or ID number		
ADN	:	UN 1950
ADR	:	UN 1950
RID	:	UN 1950
IMDG	:	UN 1950
ΙΑΤΑ	:	UN 1950
14.2 UN proper shipping name		
ADN	:	AEROSOLS
ADR	:	AEROSOLS
RID	:	AEROSOLS
IMDG	:	AEROSOLS (pentane, zinc oxide)
ΙΑΤΑ	:	Aerosols, flammable
14.3 Transport hazard class(es)		
ADN	:	2
ADR	:	2
RID	:	2
IMDG	:	2.1
ΙΑΤΑ	:	2.1
14.4 Packing group		
ADN Packing group Classification Code Labels	:	Not assigned by regulation 5F 2.1



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Class Label	ng group ification Code s el restriction code		Not assigned by regulation 5F 2.1 (D)	
RID Packing group Classification Code Hazard Identification Number Labels			Not assigned by regulation 5F 23 2.1	
IMDG Packi Labels EmS	ng group s	:	Not assigned by regulation 2.1 F-D, S-U	
Packi aircra Packi	ng instruction (LQ) ng group		203 Y203 Not assigned by regulation Flammable Gas	
IATA (Passenger) Packing instruction (passen- ger aircraft) Packing instruction (LQ) Packing group Labels		:	203 Y203 Not assigned by regulation Flammable Gas	
14.5 Envir	onmental hazards			
ADN Enviro	onmentally hazardous	:	yes	
ADR Enviro	onmentally hazardous	:	yes	
RID Enviro	onmentally 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.



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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 Not applicable 1 the market and use of certain dangerous substances, mixtures and articles (Annex XVII) REACH - Candidate List of Substances of Very High This product does not contain sub-2 Concern for Authorisation (Article 59). stances of very high concern (Regu-(EU SVHC) lation (EC) No 1907/2006 (REACH), Article 57). REACH - List of substances subject to authorisation ÷ Not applicable (Annex XIV) (EU. REACH-Annex XIV) Regulation (EC) No 1005/2009 on substances that de-Not applicable 2 plete the ozone layer (EC 1005/2009) Regulation (EU) 2019/1021 on persistent organic pollu-Not applicable 5 tants (recast) (EU POP) Regulation (EC) No 649/2012 of the European Parlia-Not applicable 2 ment and the Council concerning the export and import of dangerous chemicals (EU PIC) : P2 Seveso III: Directive 2012/18/EU of the European P3a FLAMMABLE AEROSOLS Parliament and of the Council on the control of major-accident hazards involving dangerous substances. E2 ENVIRONMENTAL HAZARDS 18 Liquefied extremely flammable gases (including LPG) and natural gas

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 82,5 %

Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national



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regulations, where applicable.

2000 XXV. Law on chemical safety

44/2000. (XII 27) Ministry of health dangerous substances and preparations dangerous for certain procedures and arrangements for activities

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of H-Statements

EUH066 H220 H225 H280 H304 H336 H400 H410 H411 EUH066 Full text of other abbreviatio	ons	Repeated exposure may cause skin dryness or cracking. Extremely flammable gas. Highly flammable liquid and vapour. Contains gas under pressure; may explode if heated. May be fatal if swallowed and enters airways. May cause drowsiness or dizziness. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Repeated exposure may cause skin dryness or cracking.
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 pack- aged 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).
2006/15/EC	:	Europe. Indicative occupational exposure limit values
HU OEL	:	Hungary. Occupational Exposure Limits - Annex 1: Permissi- ble concentration values
2006/15/EC / TWA	:	Limit Value - eight hours
HU OEL / TWA HU OEL / CEIL	÷	Mean concentration Peak concentration
HU UEL / GEIL	•	



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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 -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 mixtur	e:	Classification procedure:
Aerosol 1	H222, H229	Based on product data or assessment
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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