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1. PRODUCT AND COMPANY IDENTIFICATION

Product name	:	OKS 1601	
Chemical nature	:	Active substance with propellant	
Manufacturer or supplier's de	eta	ils	
Company name of supplier	:	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	:		
Emergency telephone number	:	+86 532 8388 9090 (NRCC, only for hazardous chemicals) +86 21 69225521	
Recommended use of the chemical and restrictions on use			
Recommended use	:	release agent spray	
Restrictions on use	:	Restricted to professional users.	

2. HAZARDS IDENTIFICATION

Emergency Overvi	W
Appearance	: aerosol
Colour	: colourless
Odour	: characteristic
Extremely flammabl	aerosol. Pressurised container: May burst if heated.
GHS Classification	
Aerosols	: Category 1

GHS label elements



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l pictograms	
word	: Danger
l statements	: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
tionary statemer	nts : Prevention: P210 Keep away from heat/ sparks/ open flames/ hot surfaces No smoking. P211 Do not spray on an open flame or other ignition source. P251 Do not pierce or burn, even after use.
	Storage: P410 + P412 Protect from sunlight. Do not expose to tempera tures exceeding 50 °C/ 122 °F.
al and chemica	al hazards erosol.Pressurised container: May burst if heated.
hazards ssified based on	available information.
nmental hazard ssified based on	ds a available information.
hazards which o	do not result in classification
	statements tionary statements al and chemica ely flammable a hazards ssified based on nmental hazard ssified based on nazards which o

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Dimethyl ether	115-10-6	>= 30 -< 50

4. FIRST AID MEASURES

If inhaled

: Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest.



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			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 ca	ase of skin contact	:	Remove contaminated clothing. If irritation develops, get med- ical attention. Wash off with soap and plenty of water. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In ca	ase of eye contact	:	Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes. If eye irritation persists, consult a specialist.
lf sw	vallowed	:	Move the victim to fresh air. Keep respiratory tract clear. Do NOT induce vomiting. Rinse mouth with water.
	effects, both acute ayed		Inhalation may provoke the following symptoms: Unconsciousness Dizziness Drowsiness Headache Nausea Tiredness
Note	es to physician	:	Treat symptomatically.

5. FIREFIGHTING MEASURES

Suitable extinguishing media	:	ABC powder
Unsuitable extinguishing media	:	High volume water jet
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
Specific extinguishing meth-	:	Standard procedure for chemical fires.



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ods		Collect contaminated fire extinguishing water separately. This

	must not be discharged into drains. Cool containers/tanks with water spray.
Special protective equipment for firefighters	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment. Exposure to decomposition products may be a hazard to health.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Evacuate personnel to safe areas. Ensure adequate ventilation. Remove all sources of ignition. Refer to protective measures listed in sections 7 and 8.
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.
Methods and materials for containment and 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.
Prevention of secondary hazards	:	Only qualified personnel equipped with suitable protective equipment may intervene.

7. HANDLING AND STORAGE

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
	wash hands and race before breaks and immediately after



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			may still contain proc Pressurized contained	tools. tions also apply to empty packaging which
Avoi	dance of contact	:	Oxidizing agents	
Stor	age			
Cond	ditions for safe sto	rage :	exposure and tempe or throw into fire eve red-hot objects.	s pressurized. Keep away from direct sun eratures over 50 °C. Do not open by force n after use. Do not spray on flames or with the particular national regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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 equipme	ent	
Respiratory protection	:	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type	:	Recommended Filter type:
		Organic gas and low boiling vapour type
Eye/face protection	:	Safety glasses with side-shields
Skin and body protection	:	Choose body protection in relation to its type, to the concen- tration and amount of dangerous substances, and to the spe- cific work-place.
Hand protection		



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Material Break through time Protective index	:	butyl-rubber > 10 min Class 1
Remarks	:	Wear protective gloves. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case.
Protective measures	:	The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Hygiene measures	•	Wash face, hands and any exposed skin thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	aerosol
Colour	:	colourless
Odour	:	characteristic
Odour Threshold	:	No data available
рН	:	6.4 (20 °C) Concentration: 100 %
Melting point/range	:	No data available
Boiling point/boiling range	:	-24.8 °C (1,013 hPa)
Flash point	:	-41 °C
		Method: Abel-Pensky
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Extremely flammable aerosol.
Self-ignition	:	No data available



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Upper explosion limit / Upper flammability limit		18.6 %(V)
Lower explosion limit / Lower flammability limit		3 %(V)
Vapour pressure	:	4,500 hPa (20 °C)
Relative vapour density	:	No data available
Relative density	:	0.84 (20 °C) Reference substance: Water The value is calculated
Density	:	0.84 g/cm3 (20 °C)
Bulk density	:	No data available
Solubility(ies) Water solubility	:	insoluble
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	< 20.5 mm2/s (40 °C)
Explosive properties	:	Not explosive
Oxidizing properties	:	No data available
Sublimation point	:	No data available
Metal corrosion rate	:	Not corrosive to metals

10. STABILITY AND REACTIVITY

Reactivity

: No hazards to be specially mentioned.



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Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	No dangerous reaction known under conditions of normal use.
Conditions to avoid	:	Heat, flames and sparks. Strong sunlight for prolonged periods. Risk of receptacle bursting.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

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	:	Remarks: This information is not available.
Components:		
Dimethyl ether:		
Acute inhalation toxicity	:	LC50 (Rat): 309 mg/l Exposure time: 4 h Test atmosphere: gas
Skin corrosion/irritation		
Product:		
Remarks	:	This information is not available.



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Components:

Dimethyl ether:

Assessment	:	No skin irritation
Result	:	No skin irritation

Serious eye damage/eye irritation

Product:

Remarks

: Contact with eyes may cause irritation.

Components:

Dimethyl ether:

Result	:	No eye irritation
Assessment	:	No eye irritation

Respiratory or skin sensitisation

Product:

Remarks : This information is not available.

Components:

Dimethyl ether:

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

Germ cell mutagenicity

Product:		
Genotoxicity in vitro	:	Remarks: No data available

Genotoxicity in vivo : Remarks: No data available

Components:

Dimethyl ether:

Genotoxicity in vitro : Test Type: Ames test



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OKS 16	01				
Version 1.7	Revision Date: 2022-07-19		t issue: 2018-08-08 t issue: 2014-03-20	Print Date: 2022-07-	19
			Method: OECD Test Result: negative	Guideline 471	
Geno	otoxicity in vivo	A	Species: Drosophila i Application Route: inl Method: OECD Test Result: negative		ar fly)
Carc	inogenicity				
<u>Prod</u> Rem		: N	No data available		
<u>Com</u>	ponents:				
Dime	ethyl ether:				
Spec Appli	cation Route sure time od	: ii : 2 : 4 : 0	Rat nhalation (gas) 2 Years 17 mg/l DECD Test Guideline negative	9 453	
Repr	oductive toxicity	,			
<u>Prod</u> Effec	l uct: ts on fertility	: F	Remarks: No data av	ailable	
Effec ment		op- : F	Remarks: No data av	ailable	
<u>Com</u>	ponents:				
	ethyl ether: oductive toxicity - ment		Fertility - Animal testing did no	t show any effects or	ı fertility.
Repe	eated dose toxici	ty			
<u>Prod</u> Rem		: 1	This information is no	t available.	
			10 / 16		a brand of



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Aspiration toxicity

Product:

This information is not available.

Components:

Dimethyl ether:

No aspiration toxicity classification

Further information

Product:

Remarks

: Information given is based on data on the components and the toxicology of similar products.

12. ECOLOGICAL INFORMATION

Ecotoxicity

<u>Product:</u> 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:		
Dimethyl ether: Toxicity to fish	:	LC50 (Poecilia reticulata (guppy)): > 4,100 mg/l



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			Exposure time: 96 h Test Type: semi-static test
	city to daphnia and datic invertebrates	other :	EC50 (Daphnia magna (Water flea)): > 4,400 mg/l Exposure time: 48 h Test Type: static test
Toxic plant	city to algae/aquatic ts	; :	EC50 (green algae): 154.9 mg/l Exposure time: 96 h
Pers	istence and degra	dability	
-	luct: egradability	:	Remarks: No data available
Phys ity	sico-chemical remov	/abil- :	Remarks: No data available
Com	ponents:		
	ethyl ether: egradability	:	aerobic Inoculum: activated sludge Result: Not readily biodegradable. Biodegradation: 5 % Exposure time: 28 d Method: OECD Test Guideline 301D
Bioa	ccumulative poter	ntial	
	luct: ccumulation	:	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).
<u>Co</u> m	ponents:		
Dim Parti	ethyl ether: tion coefficient: n- nol/water	:	log Pow: 0.07 (25 °C)



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Mobility in soil

<u>Product:</u> Mobility	:	Remarks: No data available
Distribution among environ- mental compartments	:	Remarks: No data available
Other adverse effects		
Product: Additional ecological infor- mation	:	No information on ecology is available.
Components:		
Dimethyl ether: Results of PBT and vPvB assessment	:	Non-classified vPvB substance Non-classified PBT substance

13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues :	Do not dispose of with domestic refuse. Dispose of as hazardous waste in compliance with local and national regulations.
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.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name Class Packing group Labels	:	UN 1950 AEROSOLS 2.1 Not assigned by regulation 2.1
IATA-DGR UN/ID No.	:	UN 1950



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Proper shipping name Class Packing group Labels Packing instruction (cargo aircraft)	:	Aerosols, flammable 2.1 Not assigned by regulation Flammable Gas 203
Packing instruction (passen- ger aircraft)	:	203
IMDG-Code		
UN number	:	UN 1950
Proper shipping name	:	AEROSOLS
Class	:	2.1
Packing group	:	Not assigned by regulation
Labels	:	2.1
EmS Code	:	F-D, S-U
Marine pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

National Regulations

GB 6944/12268

UN number	:	UN 1950
Proper shipping name	:	AEROSOLS
Class	:	2.1
Packing group	:	Not assigned by regulation
Labels	:	2.1

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.

15. REGULATORY INFORMATION

National regulatory information

Regulations on Safety Management of Hazardous Chemicals					
Hazardous Chemicals for Priority Management under SAWS	:	Not applicable			
China Severely Restricted Toxic Chemicals for Import and Export	:	Not applicable			
Catalogue of Hazardous Chemicals	:	Listed			



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Product name	Status	Reference number
OKS 1601	Listed	2828

List of ingredients	CAS-No.	Status	Reference number
Dimethyl ether	115-10-6	Listed	479

Identification of Major Hazard Installations for Hazardous Chemicals (GB 18218)No. / CodeChemical name / CategoryW3AerosolsThreshold quantity150 t

The components of this product are reported in the following inventories: IECSC : On the inventory, or in compliance with the inventory

16. OTHER INFORMATION

Date format

: yyyy/mm/dd

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); 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; ERG - Emergency Response Guide; 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; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Develop-



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ment; 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

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