according to GB/T 16483 and GB/T 17519  $\ensuremath{\text{CN}}$ 



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### **1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	:	Klübersynth GEM 4-32 NH
Article-No.	:	012296
Chemical nature	:	Synthetic hydrocarbon oil ester oil
Manufacturer or supplier's de	eta	ils
Company	:	Klüber Lubrication München Geisenhausenerstr. 7 81379 München Deutschland Tel: +49 (0) 89 7876 0 Fax: +49 (0) 89 7876 333 info@klueber.com
E-mail address of person responsible for the SDS	:	mcm@klueber.com Material Compliance Management
National contact	:	Klüber Lubrication (Shanghai) Co., Ltd. No.88 Tuo Qing Road Qingpu Industrial Zone Shanghai 201700 China Phone: +86 21 69225666 Email: info@cn.klueber.com www.klueber.com.cn
		Klüber Lubrication China Limited Room 1012 Shatin Galleria 18-24 Shan Mei Street, Fotan, Shatin, N.T. Hong Kong China Phone: +852 26920191 Email: info@cn.klueber.com www.klueber.com.cn
Emergency telephone number	:	+86 532 8388 9090 (NRCC, only for hazardous chemicals) +86 21 69225521
Pacammandad usa of the ch		ical and restrictions on use

#### Recommended use of the chemical and restrictions on use

Recommended use	: Lubricating oil
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Restrictions on use	:	Restricted to professional users.
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### 2. HAZARDS IDENTIFICATION

Appearance	: liquid	
Colour	: yellow	
Odour	: characteristic	
Not a hazardous subst	ance or mixture.	
GHS Classification		
Not a hazardous subst	ance or mixture.	
GHS label elements		
Not a hazardous subst	ance or mixture.	
Physical and chemica	al hazards	
Not classified based or	available information.	
Health hazards		
Not classified based or	available information.	
Environmental hazaro	ls	
Not classified based or	available information.	
Other hazards which	do not result in classification	
None known.		
OMPOSITION/INFORM	IATION ON INGREDIENTS	
Substance / Mixture	: Mixture	

No hazardous ingredients

### 4. FIRST AID MEASURES

If inhaled	:	Remove person to fresh air. If signs/symptoms continue, get medical attention. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respira- tion.
In case of skin contact	:	Remove contaminated clothing. If irritation develops, get med-



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			ical attention. In case of contact, immediately flush	skin with plenty of water.
In c	ase of eye contact	:	Rinse immediately with plenty of wate for at least 10 minutes. If eye irritation persists, consult a spe	
lf sv	If swallowed		Move the victim to fresh air. Do NOT induce vomiting. Rinse mouth with water.	
and	Most important symptoms and effects, both acute and delayed		No information available. None known.	
Not	Notes to physician		No information available.	
5. FIRE	FIGHTING MEASURES			
Sui	table extinguishing media	:	Use water spray, alcohol-resistant for bon dioxide.	am, dry chemical or car-
	Unsuitable extinguishing media		High volume water jet	
	ecific hazards during fire- ting	:	Fire may cause evolution of: Carbon oxides	
Spe ods	ecific extinguishing meth-	:	Standard procedure for chemical fires	S.
	Special protective equipment for firefighters		In the event of fire, wear self-contained Use personal protective equipment. Exposure to decomposition products health.	

### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Evacuate personnel to safe areas. Use personal protective equipment. 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.



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•		ds and materials for Inment and cleaning up	:	Contain spillage, and then collect sorbent material, (e.g. sand, earth miculite) and place in container fo / national regulations (see section	n, diatomaceous earth, ver- or disposal according to local
7. HA	NDLI	NG AND STORAGE			
ŀ	Handli	ng			
A	Advice	on safe handling	:	For personal protection see section Smoking, eating and drinking sho plication area. Wash hands and face before breat handling the product.	uld be prohibited in the ap-
A	Avoida	nce of contact	:	No materials to be especially mer	ntioned.
S	Storag	je			
C	Conditi	ions for safe storage	:	Store in original container. Keep container closed when not in Keep in a dry, cool and well-ventil Containers which are opened must kept upright to prevent leakage. Store in accordance with the partin Keep in properly labelled contained	lated place. st be carefully resealed and icular national regulations.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Contains no substances with occupational exposure limit values.

Engineering measures : none

### Personal protective equipment

		4 / 11	a brand of
Remarks	:	Wear protective gloves. The break th	nrough time depends
Hand protection Material Break through time Protective index	:	Nitrile rubber > 10 min Class 1	
Eye/face protection	:	Safety glasses with side-shields	
Filter type	:	Filter type A-P	
Respiratory protection	:	Not required; except in case of aeros	sol formation.



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Prote	ective measures	<ul> <li>type of glove and therefore ha case.</li> <li>The type of protective equipm to the concentration and amo at the specific workplace. Choose body protection in rel</li> </ul>	naterial, the thickness and the as to be measured for each nent must be selected according unt of the dangerous substance ation to its type, to the concen- ous substances, and to the spe-
Hygie	ene measures	: Wash face, hands and any ex handling.	posed skin thoroughly after

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	yellow
Odour	:	characteristic
Odour Threshold	:	No data available
рН	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	>= 200 °C
		Method: ISO 2592, open cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Not applicable
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapour pressure	:	< 0.001 hPa (20 °C)



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Rel	ative vapour density	:	No data available	
Der	nsity	:	0.85 g/cm3 (20 °C)	
Bul	k density	:	No data available	
	ubility(ies) Water solubility	:	insoluble	
	Solubility in other solvents	5 :	No data available	
	rtition coefficient: n- anol/water	:	No data available	
Aut	o-ignition temperature	:	No data available	
Dec	composition temperature	:	No data available	
	cosity Viscosity, dynamic	:	No data available	
,	Viscosity, kinematic	:	32 mm2/s ( 40 °C)	
Exp	plosive properties	:	Not explosive	
Oxi	idizing properties	:	No data available	
Sub	plimation point	:	No data available	
10. STA	BILITY AND REACTIVIT	Y		
Rea	activity	:	No hazards to be specially me	ntioned.
Che	emical stability	:	Stable under normal conditions	S.
Pos	ssibility of hazardous reac	- :	No dangerous reaction known	under conditions of normal use

tions		
Conditions to avoid	:	No conditions to be specially mentioned.
Incompatible materials	:	No materials to be especially mentioned.
Hazardous decomposition products	:	No decomposition if stored and applied as directed.



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### **11. TOXICOLOGICAL INFORMATION**

### Acute toxicity

## Product:

Acute oral toxicity	:	Remarks: This information is not available.
Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Remarks: This information is not available.
Skin corrosion/irritation		
Product:		
Remarks	:	This information is not available.
Serious eye damage/eye irr	ritati	ion
Product:		
Remarks	:	This information is not available.
Respiratory or skin sensitis	satic	on
Product:		
Remarks	:	This information is not available.
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



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Rene	ated dose toxicity		
-	-		
<u>Produ</u>		<b>-</b>	
Rema	Irks	: This information is not available.	
Aspir	ation toxicity		
Produ	uct:		
-	nformation is not ava	ilable.	
Furth	er information		
<u>Produ</u>	<u>uct:</u>		
Rema	ırks	: Information given is based on data the toxicology of similar products.	on the components and

### **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	:	Remarks: No data available
Toxicity to microorganisms	:	Remarks: No data available
Persistence and degradabilit	ty	
Product:		
Biodegradability	:	Remarks: No data available
Physico-chemical removabil- ity	:	Remarks: No data available
Bioaccumulative potential		
Product:		
Bioaccumulation	:	Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT). This mixture contains no substance considered to be very



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				persistent and very bioaccumulating (vPv	В).
	Mobili	ty in soil			
	Produ	<u>ct:</u>			
	Mobility	у	:	Remarks: No data available	
		ution among environ- compartments	:	Remarks: No data available	
	Other	adverse effects			
	<u>Produ</u>	<u>ct:</u>			
	Additio mation	nal ecological infor-	:	No information on ecology is available.	
13. [	DISPOS	SAL CONSIDERATIO	NS		
	Dispos	sal methods			
	Waste	from residues	:	The product should not be allowed to entropy courses or the soil.	er drains, water

Contaminated packaging	:	Packaging that is not properly emptied must be disposed of as the unused product. Dispose of waste product or used containers according to local regulations.
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#### **14. TRANSPORT INFORMATION**

#### International Regulations

**UNRTDG** Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous good

**IMDG-Code** Not regulated as a dangerous good

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

Not regulated as a dangerous good



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### Special precautions for user

Not applicable

#### **15. REGULATORY INFORMATION**

National regulatory information		
Regulations on Safety Management of Hazardous C	Cher	micals
Catalogue of Hazardous Chemicals	:	Not applicable
Hazardous Chemicals for Priority Management under SAWS	:	Not applicable
Regulations on Labour Protection in Workplaces w	her	e Toxic Substances are Used
Catalogue of Highly Toxic Chemicals	:	
Regulation of Environmental Management on the F and Export of Toxic Chemicals	irst	Import of Chemicals and the Import
China Severely Restricted Toxic Chemicals for Import and Export	:	Not applicable
The components of this product are reported in theIECSC: On the inventory, or		lowing inventories: ompliance with the inventory

### **16. OTHER INFORMATION**

Date format : yyyy/mm/dd

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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;



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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 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; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; 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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