according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021

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

1.1	Product	identifier

Product name : Klüberbio AG 39-602

Article-No.

on use

: 009042

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

Use of the Sub- stance/Mixture		Grease
Recommended restrictions	:	For professional users only.

# 1.3 Details of the supplier of the safety data sheet

saf	ety data sheet
:	Klüber Lubrication München Geisenhausenerstr. 7 81379 München Deutschland Tel: +49 (0) 89 7876 0 Fax: +49 (0) 89 7876 333 info@klueber.com
:	mcm@klueber.com Material Compliance Management
:	Klüber Lubrication Benelux S.A./N.V. Rue Cardinal Mercier 100 7711 Dottignies Belgium +32-56-483311 Fax: +32-56-483380 kluber@be.kluber.com
	:

## **1.4 Emergency telephone number**

Emergency telephone num- : +49 89 7876 700 (24 hrs) ber

## **SECTION 2: Hazards identification**

## 2.1 Classification of the substance or mixture

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

Not a hazardous substance or mixture.



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021

## 2.2 Label elements

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

Not a hazardous substance or mixture.

## **Additional Labelling**

EUH210 Safety data sheet available on request.

#### 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.

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

2

## 3.2 Mixtures

Chemical nature

ester oil Calcium soap

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration limits M-Factor Notes	Concentration (% w/w)
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylene- poly-, triethylenetet- ramine fraction and 3- (C9–C15, C12 rich, alk-1-enyl)dihydro-2,5- furandione	947-263-6 01-2120761103-66- XXXX	Skin Irrit.2; H315 Repr.2; H361fd Aquatic Chronic4; H413		>= 1 - < 2,5

For explanation of abbreviations see section 16.

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

#### 4.1 Description of first aid measures

If inhaled

: Obtain medical attention.

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.



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version 3.4	Revision Date: 01.02.2021	Date of last issue: 14.10.2020 Date of first issue: 28.09.2015	Print Date: 01.02.2021		
		If breathing is irregular or stortion.	pped, administer artificial respira-		
In ca	se of skin contact	<ul> <li>Take off all contaminated clob Get medical attention immedi persists.</li> <li>Wash clothing before reuse.</li> <li>Thoroughly clean shoes befo</li> <li>Wash off immediately with place</li> </ul>	iately if irritation develops and ore reuse.		
In case of eye contact		for at least 10 minutes.	Rinse immediately with plenty of water, also under the eyelids for at least 10 minutes. If eye irritation persists, consult a specialist.		
If swallowed		<ul> <li>Move the victim to fresh air. If unconscious, place in recover advice.</li> <li>Keep respiratory tract clear.</li> <li>Do not induce vomiting witho Obtain medical attention.</li> <li>Never give anything by mouth</li> </ul>			

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

Symptoms	:	No information available.
Risks	:	None known.

## 4.3 Indication of any immediate medical attention and special treatment needed

Treatment	: No information available.
rieauneni	

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

media

Suitable extinguishing media	:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Unsuitable extinguishing	:	High volume water jet

# 5.2 Special hazards arising from the substance or mixture

Hazardous combustion prod- ucts	:	Carbon oxides Nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus Halogenated compounds Metal oxides
------------------------------------	---	---



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version 3.4	Revision Date: 01.02.2021		te of last issue: 14.10.2020 te of first issue: 28.09.2015	Print Date: 01.02.2021
Sp	vice for firefighters ecial protective equipmen firefighters	nt :	In the event of fire, wear self-co Use personal protective equipm tion products may be a hazard t	ent. Exposure to decomposi-
Fu	rther information	:	Standard procedure for chemica	al fires.

## **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	<ul> <li>Evacuate personnel to safe areas.</li> <li>Use the indicated respiratory protection if the occupational exposure limit is exceeded and/or in case of product release (dust).</li> <li>Do not breathe vapours, aerosols.</li> </ul>
	Refer to protective measures listed in sections 7 and 8.

## **6.2 Environmental precautions**

Environmental precautions	:	Try to prevent the material from entering drains or water courses. Local authorities should be advised if significant spillages cannot be contained.
---------------------------	---	---

## 6.3 Methods and material for containment and cleaning up

Methods for cleaning up	:	Clean up promptly by sweeping or vacuum.
		Keep in suitable, closed containers for disposal.

## 6.4 Reference to other sections

For personal protection see section 8.

## **SECTION 7: Handling and storage**

## 7.1 Precautions for safe handling

	5	
Advice on safe handling	:	Avoid contact with skin and eyes. For personal protection see section 8. 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 repack. These safety instructions also apply to empty packaging which may still contain product residues. Keep container closed when not in use.



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version 3.4	Revision Date: 01.02.2021		e of last issue: 14.10.2020 e of first issue: 28.09.2015	Print Date: 01.02.2021
Hygi	ene measures	:	Wash face, hands and any expose handling.	d skin thoroughly after
7.2 Cond	litions for safe storage	e, inc	luding any incompatibilities	
	uirements for storage s and containers	:	Store in original container. Keep co use. Keep in a dry, cool and well-v which are opened must be carefull to prevent leakage. Store in accord national regulations. Keep in prope	entilated place. Containers y resealed and kept upright dance with the particular
•	ific end use(s) cific use(s)	:	Specific instructions for handling, r	not required.

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

## 8.1 Control parameters

Contains no substances with occupational exposure limit values.

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

Substance name	End Use	Exposure routes	Potential health ef- fects	Value
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyeth- ylenepoly-, triethyl- enetetramine fraction and 3-(C9–C15, C12 rich, alk-1- enyl)dihydro-2,5- furandione	Workers	Inhalation	Long-term systemic effects	3,72 mg/m3
	Workers	Skin contact	Long-term systemic effects	1,04 mg/m3

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

Substance name	Environmental Compartment	Value		
Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, tri- ethylenetetramine fraction and 3- (C9–C15, C12 rich, alk-1- enyl)dihydro-2,5-furandione	Fresh water	0,496 mg/l		
	Marine water	0,05 mg/l		
	Microbiological Activity in Sewage Treat- ment Systems	100 mg/l		



according to Regulation (EC) No. 1907/2006 - NL



# Klüberbio AG 39-602

Version 3.4	Revision Date: 01.02.2021	Date of last issue: 14.10.2020 Date of first issue: 28.09.2015	Print Date: 01.02.2021
		Fresh water sediment	3772830,55 mg/kg
		Marine sediment	377283,06 mg/kg
		Soil	3935351,65
			mg/kg
8.2 Expo	sure controls		
Engi	neering measures		

Handle only in a place equipped with local exhaust (or other appropriate exhaust).

Personal protective equipment				
Eye protection	:	Safety glasses with side-shields		
	:	Nitrile rubber > 10 min 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 specifica- tions of Regulation (EU) 2016/425 and the standard EN 374 derived from it.		
Respiratory protection	:	Not required; except in case of aerosol formation.		
Filter type	:	Filter type 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 concen- tration 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

Appearance	:	paste
Colour	:	yellow
Odour	:	characteristic
Odour Threshold	:	No data available



according to Regulation (EC) No. 1907/2006 - NL



# Klüberbio AG 39-602

Versior 3.4	Revision Date: 01.02.2021		of last issue: 14.10.2020 of first issue: 28.09.2015	Print Date: 01.02.2021
			Net appliable	
рH		:	Not applicable	
Me	elting point/range	:	No data available	
Bo	iling point/boiling range	:	No data available	
Fla	ash point	:	Not applicable	
Ev	aporation rate	:	No data available	
Fla	ammability (solid, gas)	:	Combustible Solids	
	oper explosion limit / Upper mmability limit	:	No data available	
	wer explosion limit / Lower mmability limit	:	No data available	
Va	pour pressure	:	< 0,001 hPa (20 °C)	
Re	elative vapour density	:	No data available	
Re	elative density	:	0,970 (20 °C) Reference substance: Water The value is calculated	
De	ensity	:	0,97 g/cm3 (20 °C)	
Bu	lk density	:	No data available	
So	lubility(ies) Water solubility	:	insoluble	
	Solubility in other solvents	5 :	No data available	
	rtition coefficient: n- tanol/water	:	No data available	
Au	to-ignition temperature	:	No data available	
De	composition temperature	:	No data available	
Vis	scosity Viscosity, dynamic	:	No data available	
	Viscosity, kinematic	:	No data available	
Ex	plosive properties	:	Not explosive	
Ox	kidizing properties	:	No data available	



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021
9.2 Other	information		
Subli	mation point	: No data available	
Self-i	gnition	: No data available	
SECTION	N 10: Stability and	reactivity	
10.1 Read	stivity		
	•		
No ha	azards to be specially	y mentioned.	
10.2 Cher	mical 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 Ko conditions to be specially mentioned.

## 10.5 Incompatible materials

Mate	erials to avoid	:	No materials to	be es	pecially	y mentioned.

## **10.6 Hazardous decomposition products**

No decomposition if stored and applied as directed.

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

#### Acute toxicity

## Product:

Acute inhalation toxicity	:	Remarks: This information is not available.
Acute dermal toxicity	:	Remarks: This information is not available.

#### **Components:**

2

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

Acute oral toxicity	:	LD50 (Rat): > 2.000 mg/kg Method: OECD Test Guideline 423
		GLP: yes



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

3.4         01.02.2021         Date of first issue: 28.09.2015         01.02.2021	Version 3.4		Date of last issue: 14.10.2020 Date of first issue: 28.09.2015	Print Date: 01.02.2021	
---	----------------	--	---	---------------------------	--

## Skin corrosion/irritation

#### Product:

Remarks

: This information is not available.

#### **Components:**

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

Assessment	:	human skin Irritating to skin.
Method	:	OECD Test Guideline 439
Result	:	Irritating to skin.
GLP	:	yes

#### Serious eye damage/eye irritation

#### Product:

Remarks

: This information is not available.

#### Components:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

Assessment	:	No eye irritation
Result	:	No eye irritation

#### Respiratory or skin sensitisation

#### Product:

:

Remarks : This information is not available.

#### **Components:**

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

Assessment:Did not cause sensitisation on laboratory animals.Result:Did not cause sensitisation on laboratory animals.

#### Germ cell mutagenicity

#### Product:

2

Genotoxicity in vitro	:	Remarks: No data available
-----------------------	---	----------------------------



according to Regulation (EC) No. 1907/2006 - NL



# Klüberbio AG 39-602

	JIO AG 39-002			
sion	Revision Date: 01.02.2021		e of last issue: 14.10.2020 e of first issue: 28.09.2015	Print Date: 01.02.2021
Genot	oxicity in vivo	:	Remarks: No data available	
Carci	nogenicity			
<u>Produ</u>	ict:			
Rema	rks	:	No data available	
Repro	oductive toxicity			
<u>Produ</u>	ict:			
Effect	s on fertility	:	Remarks: No data available	
Effect ment	s on foetal develop-	:	Remarks: No data available	
<u>Comp</u>	onents:			
			C16-18, C18 unsatd. with Amines, p C15, C12 rich, alk-1-enyl)dihydro-2,	
:				
Repro sessm	ductive toxicity - As- ient	:	Some evidence of adverse effects animal experiments., Some eviden sexual function and fertility, based Some evidence of adverse effects animal experiments., Some eviden sexual function and fertility, based	ce of adverse effects on on animal experiments. on development, based or ce of adverse effects on
Repea	ated dose toxicity			
Produ	ict:			
Rema		:	This information is not available.	
Aspir	ation toxicity			
Produ	ict:			
This ir	nformation is not avail	able.		
Furth	er information			
Furth <u>Produ</u>				



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021

## **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:**

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

:

•	
Toxicity to fish :	LC50 (Oncorhynchus mykiss (rainbow trout)): > 1.000 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 203 GLP: yes
Toxicity to daphnia and other : aquatic invertebrates	EC50 (Daphnia magna (Water flea)): > 1.000 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)): 496 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- ity	:	Remarks: No data available



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021

#### **Components:**

:

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

Biodegradability	: Test Type: anaerobic Inoculum: activated sludge Concentration: 3,77 mg/l Result: Not readily biodegradable. Biodegradation: 10 % Exposure time: 28 d Method: OECD Test Guideline 301D
	GLP: yes

#### 12.3 Bioaccumulative potential

## Product:

Bioaccumulation	•	Remarks: This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).
		This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

## **Components:**

Reaction products of fatty acids, C16-18, C18 unsatd. with Amines, polyethylenepoly-, triethylenetetramine fraction and 3-(C9–C15, C12 rich, alk-1-enyl)dihydro-2,5-furandione

Partition coefficient: n-	:	log Pow: > 10
octanol/water		

## 12.4 Mobility in soil

:

<u>Product:</u> 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 Other adverse effects

#### Product:



according to Regulation (EC) No. 1907/2006 - NL



# Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021
Addit matio	ional ecological infor- m	: No information on ecology is available.	

## **SECTION 13: Disposal considerations**

13.1 Waste treatment methods	
Product :	The product should not be allowed to enter drains, water courses or the soil. 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. Dispose of waste product or used containers according to local regulations.
	The following Waste Codes are only suggestions:
Waste Code :	used product, unused product 12 01 12*, spent waxes and fats
	uncleaned packagings 15 01 10, packaging containing residues of or contaminated by hazardous substances

## **SECTION 14: Transport information**

## 14.1 UN number

ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good
ΙΑΤΑ	:	Not regulated as a dangerous good
14.2 UN proper shipping name		
ADN	:	Not regulated as a dangerous good
ADR	:	Not regulated as a dangerous good
RID	:	Not regulated as a dangerous good
IMDG	:	Not regulated as a dangerous good



according to Regulation (EC) No. 1907/2006 - NL



# Klüberbio AG 39-602

Version 3.4	Revision Date: 01.02.2021	Date of last issue: 14.10.2020Print Date:Date of first issue: 28.09.201501.02.2021	
ΙΑΤΑ		: Not regulated as a dangerous good	
4.3 Tran	sport hazard class(	5)	
ADN		: Not regulated as a dangerous good	
ADR		: Not regulated as a dangerous good	
RID		: Not regulated as a dangerous good	
IMDO	6	: Not regulated as a dangerous good	
ΙΑΤΑ		: Not regulated as a dangerous good	
4.4 Pack	ing group		
ADN		: Not regulated as a dangerous good	
ADR		: Not regulated as a dangerous good	
RID		: Not regulated as a dangerous good	
IMDG	6	: Not regulated as a dangerous good	
ΙΑΤΑ	(Cargo)	: Not regulated as a dangerous good	
ΙΑΤΑ	(Passenger)	: Not regulated as a dangerous good	
4.5 Envi	ronmental hazards		
ADN		: Not regulated as a dangerous good	
ADR		: Not regulated as a dangerous good	
RID		: Not regulated as a dangerous good	
IMDO	3	: Not regulated as a dangerous good	
ΙΑΤΑ	(Passenger)	: Not regulated as a dangerous good	
ΙΑΤΑ	(Cargo)	: Not regulated as a dangerous good	
•	<b>ial precautions for</b> pplicable	ser	
	-	ng to Annex II of Marpol and the IBC Code	
Rema	arks	: Not applicable for product as supplied.	

## 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	<ul> <li>This product does not contain sub- stances of very high concern (Regu- lation (EC) No 1907/2006 (REACH), Article 57).</li> </ul>
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
Regulation (EC) No 1005/2009 on substances that de-	: Not applicable
14 / 16	a brand of



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version 3.4	Revision Date: 01.02.2021			t issue: 14.10.20 t issue: 28.09.20		Print Date: 01.02.2021
plete	the ozone layer					
	lation (EU) 2019/1021 (recast)	on pe	ersisten	t organic pollu-	:	Not applicable
ment	lation (EC) No 649/20 and the Council conc ngerous chemicals				:	Not applicable
the m	CH - Restrictions on the parket and use of certan parations and articles (A	ain dar	ngerous		:	Not applicable
Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. Not applicable						
	ral Assessment Metho tic harmfulness	odolog :	gy (GAN B4	,	r aq	uatic organisms.
Abate	ement effort	:	В	Readily biodeg	grad	able aquatic harmful substances.
Volati	ile organic compounds	anic compounds : Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) Not applicable				

## 15.2 Chemical safety assessment

This information is not available.

## **SECTION 16: Other information**

#### Full text of H-Statements

H315	:	Causes skin irritation.
H361fd	:	Suspected of damaging fertility. Suspected of damaging the unborn child.
H413	:	May cause long lasting harmful effects to aquatic life.

#### Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; 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;



according to Regulation (EC) No. 1907/2006 - NL



## Klüberbio AG 39-602

Version	Revision Date:	Date of last issue: 14.10.2020	Print Date:
3.4	01.02.2021	Date of first issue: 28.09.2015	01.02.2021

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; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### Further information

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.

