acc. to Regulation (EC) No. 1907/2006 (REACH)





article number: **1L4Y** Version: **2.0 en** Replaces version of: 2021-07-29 Version: (1)

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

1.1 Product identifier

Identification of the substance	Aluminium sulphate ROTI®METIC 99,99 % (4N)
Article number	1L4Y
EC number	233-135-0
CAS number	10043-01-3
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# 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses:

Laboratory chemical Laboratory and analytical use

Uses advised against:

Do not use for private purposes (household). Food, drink and animal feedingstuffs.

# **1.3** Details of the supplier of the safety data sheet

Carl Roth GmbH + Co. KG Schoemperlenstr. 3-5 D-76185 Karlsruhe Germany

**Telephone:**+49 (0) 721 - 56 06 0 **Telefax:** +49 (0) 721 - 56 06 149 **e-mail:** sicherheit@carlroth.de **Website:** www.carlroth.de

Competent person responsible for the safety data Department Health, Safety and Environment sheet:

# e-mail (competent person):

# sicherheit@carlroth.de

# 1.4 Emergency telephone number

Name	Street	Postal code/city	Telephone	Website
National Poisons Information Service City Hospital	Dudley Rd	B187QH Birmingham	844 892 0111	

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

# Classification acc. to GHS

Section	Hazard class		Hazard class and category	Hazard statement
2.16	Substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318

For full text of abbreviations: see SECTION 16

date of compilation: 2021-07-29 Revision: 2024-03-02

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# 2.2 Label elements

# Labelling

Signal word Danger

# **Pictograms**

GHS05



# **Hazard statements**

H290	May be corrosive to metals
H318	Causes serious eye damage

# **Precautionary statements**

# **Precautionary statements - prevention**

P280 Wear protective gloves/eye protection

# **Precautionary statements - response**

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

# 2.3 Other hazards

# **Results of PBT and vPvB assessment**

According to the results of its assessment, this substance is not a PBT or a vPvB.

# Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .

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

# 3.1 Substances

Name of substance	Aluminium sulphate
Molecular formula	$AI_2O_{12}S_3$
Molar mass	342,2 <sup>g</sup> / <sub>mol</sub>
CAS No	10043-01-3
EC No	233-135-0

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures



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#### **General notes**

Take off contaminated clothing.

### **Following inhalation**

Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following skin contact

Rinse skin with water/shower. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### **Following ingestion**

Rinse mouth. Call a doctor if you feel unwell.

- **4.2 Most important symptoms and effects, both acute and delayed** Risk of blindness, Risk of serious damage to eyes
- **4.3 Indication of any immediate medical attention and special treatment needed** none

# **SECTION 5: Firefighting measures**

5.1 Extinguishing media



# Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings! water, foam, alcohol resistant foam, dry extinguishing powder, ABC-powder

# Unsuitable extinguishing media

water jet

# 5.2 Special hazards arising from the substance or mixture

Non-combustible.

# Hazardous combustion products

In case of fire may be liberated: Sulphur oxides (SOx)

# 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

# **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures



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### For non-emergency personnel

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe dust.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it.

# 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains. Take up mechanically.

#### Advice on how to clean up a spill

Take up mechanically. Control of dust.

# Other information relating to spills and releases

Place in appropriate containers for disposal.

# 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

# **SECTION 7: Handling and storage**

# 7.1 Precautions for safe handling

Avoid dust formation.

# Measures to prevent fire as well as aerosol and dust generation

Removal of dust deposits.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in a dry place. Hygroscopic solid.

# Incompatible substances or mixtures

Observe hints for combined storage.

#### Consideration of other advice:

# **Ventilation requirements**

Use local and general ventilation.

# Specific designs for storage rooms or vessels

Recommended storage temperature: 15 - 25 °C

# 7.3 Specific end use(s)

No information available.

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

### 8.1 Control parameters

# **National limit values**

# **Occupational exposure limit values (Workplace Exposure Limits)**

Coun try	Name of agent	CAS No	Identifi- er	TWA [mg/ m³]	STEL [mg/ m³]	Ceil- ing-C [mg/ m <sup>3</sup> ]	Nota- tion	Source
GB	dust		WEL	10			i	EH40/2005
GB	dust		WEL	4			r	EH40/2005

Notation

Ceiling-C<br/>iCeiling value is a limit value above which exposure should not occuriInhalable fractionrRespirable fractionSTELShort-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-<br/>minute period (unless otherwise specified)TWATime-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8<br/>hours time-weighted average (unless otherwise specified)

# Human health values

Relevant DNELs and other threshold levels							
Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time			
DNEL	13,4 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects			
DNEL	3,8 mg/kg bw/ day	human, dermal	worker (industry)	chronic - systemic effects			

# 8.2 Exposure controls

# Individual protection measures (personal protective equipment)

# **Eye/face protection**



Use safety goggle with side protection.

Skin protection



#### hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. The times are approximate values from measurements at 22 ° C and permanent contact. Increased temperatures due to heated substances, body heat etc. and a reduction of the effective layer thickness by stretching can lead to a consider-able reduction of the breakthrough time. If in doubt, contact manufacturer. At an approx. 1.5 times larger / smaller layer thickness, the respective breakthrough time is doubled / halved. The data apply only to the pure substance. When transferred to substance mixtures, they may only be considered as

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#### a guide.

# • type of material

NBR (Nitrile rubber)

# • material thickness

>0,11 mm

# • breakthrough times of the glove material

>480 minutes (permeation: level 6)

#### other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended.

# **Respiratory protection**



Respiratory protection necessary at: Dust formation. Particulate filter device (EN 143). P1 (filters at least 80 % of airborne particles, colour code: White).

### **Environmental exposure controls**

Keep away from drains, surface and ground water.

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

Physical state	solid
Form	powder
Colour	white
Odour	odourless
Melting point/freezing point	770 °C (ECHA)
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not applicable
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	not applicable
Kinematic viscosity	not relevant
Solubility(ies)	
Water solubility	300 <sup>g</sup> / <sub>l</sub> at 20 °C

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Partition coefficient	
Partition coefficient n-octanol/water (log value):	not relevant (inorganic)
Vapour pressure	not determined
Density and/or relative density	
Density	~ 2,71 <sup>g</sup> / <sub>cm³</sub> at 20 °C
Relative vapour density	Information on this property is not available.
Particle characteristics	No data available.
Other safety parameters	
Oxidising properties	none
Other information	
Information with regard to physical hazard classes:	
Corrosive to metals	category 1: corrosive to metals
Other safety characteristics:	
Surface tension	73 <sup>mN</sup> / <sub>m</sub> (20 °C) (ECHA)

# **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

9.2

It's a reactive substance. Substance or mixture corrosive to metals.

# **10.2** Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

# 10.3 Possibility of hazardous reactions

Violent reaction with: strong oxidiser, Strong alkali

# 10.4 Conditions to avoid

Protect from moisture.

# 10.5 Incompatible materials

different metals

# **10.6** Hazardous decomposition products

Hazardous combustion products: see section 5.

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# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

# **Classification acc. to GHS**

# Acute toxicity

Shall not be classified as acutely toxic.

GHS of the United Nations, annex 4. May be harmful if swallowed.

Acute toxicity							
Exposure route	Endpoint	Value	Species	Method	Source		
oral	LD50	>2.000 - <5.000 <sup>mg</sup> / <sub>kg</sub>	rat		ECHA		
dermal	LD50	>5.000 <sup>mg</sup> / <sub>kg</sub>	rabbit		ECHA		

# Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

# Serious eye damage/eye irritation

Causes serious eye damage.

# Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

# Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

# Carcinogenicity

Shall not be classified as carcinogenic.

# **Reproductive toxicity**

Shall not be classified as a reproductive toxicant.

# Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

# Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

# **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

# Symptoms related to the physical, chemical and toxicological characteristics

# If swallowed

Data are not available.

# • If in eyes

Causes serious eye damage, risk of blindness

# • If inhaled

Data are not available.

# • If on skin

Data are not available.

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# Other information

This information is based upon the present state of our knowledge.

- **11.2** Endocrine disrupting properties Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .
- 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)							
Endpoint	Value	Species	Source	Exposure time			
LC50	>85,9 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	96 h			
EC50	>0,156 <sup>mg</sup> / <sub>l</sub>	fish	ECHA	96 h			
ErC50	0,644 <sup>mg</sup> / <sub>l</sub>	algae	ECHA	72 h			

# Aquatic toxicity (chronic)

Endpoint	Value	Species	Source	Exposure time
EC50	>1.000 <sup>mg</sup> / <sub>l</sub>	microorganisms	ECHA	180 min

# 12.2 Persistence and degradability

Data are not available.

- **12.3 Bioaccumulative potential** Data are not available.
- 12.4 Mobility in soil

Data are not available.

- **12.5 Results of PBT and vPvB assessment** Data are not available.
- **12.6** Endocrine disrupting properties Does not contain an endocrine disruptor (ED) at a concentration of  $\ge 0,1\%$ .

# 12.7 Other adverse effects

Data are not available.

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# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods



This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

#### Sewage disposal-relevant information

Do not empty into drains.

#### Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

#### 13.2 Relevant provisions relating to waste

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

#### Properties of waste which render it hazardous

HP 4 irritant - skin irritation and eye damage

#### 13.3 Remarks

Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions. Non-contaminated packages may be recycled.

# **SECTION 14: Transport information**

14.1	UN number or ID number	
	ADRRID	UN 3260
	IMDG-Code	UN 3260
	ICAO-TI	UN 3260
14.2	UN proper shipping name	
	ADRRID	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
	IMDG-Code	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
	ICAO-TI	Corrosive solid, acidic, inorganic, n.o.s.
	Technical name	Aluminium sulphate
14.3	Transport hazard class(es)	
	ADRRID	8
	IMDG-Code	8
	ICAO-TI	8
14.4	Packing group	
	ADRRID	III
	IMDG-Code	III

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	ICAO-TI	III
4.5	Environmental hazards	non-environmentally hazardous acc. to the dan- gerous goods regulations
4.6	Special precautions for user	
	Provisions for dangerous goods (ADR) should	be complied within the premises.
4.7	Maritime transport in bulk according to IM	lO instruments
	The cargo is not intended to be carried in bulk	κ.
4.8	Information for each of the UN Model Regu	ulations
	Agreement concerning the International Constrained Constrained and Constrained	arriage of Dangerous Goods by Road (ADR)Addition
	Proper shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.
	Particulars in the transport document	UN3260, CORROSIVE SOLID, ACIDIC, INORGANI N.O.S., (Aluminium sulphate), 8, III, (E)
	Classification code	C2
	Danger label(s)	8
	Special provisions (SP)	274
	Excepted quantities (EQ)	E1
	Limited quantities (LQ)	5 kg
	Transport category (TC)	3
	Tunnel restriction code (TRC)	E
	Hazard identification No	80
	Emergency Action Code	2X
	Regulations concerning the International C information	Carriage of Dangerous Goods by Rail (RID)Additiona
	Classification code	C2
	Danger label(s)	8
	Special provisions (SP)	274
	Excepted quantities (EQ)	E1
	Limited quantities (LQ)	5 kg
	Transport category (TC)	3
	Hazard identification No	80

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International Maritime Dangerous Goods Code (IMDG) - Additional information			
Proper shipping name	CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S.		
Particulars in the shipper's declaration	UN3260, CORROSIVE SOLID, ACIDIC, INORGANIC, N.O.S., (Aluminium sulphate), 8, III		
Marine pollutant	-		
Danger label(s)	8		
Special provisions (SP)	223, 274		
Excepted quantities (EQ)	E1		
Limited quantities (LQ)	5 kg		
EmS	F-A, S-B		
Stowage category	A		
Segregation group	1 - Acids		
International Civil Aviation Organization (ICAC	-IATA/DGR) - Additional information		
Proper shipping name	Corrosive solid, acidic, inorganic, n.o.s.		
Particulars in the shipper's declaration	UN3260, Corrosive solid, acidic, inorganic, n.o.s., (Aluminium sulphate), 8, III		
Danger label(s)	8		
Special provisions (SP)	A3		
Excepted quantities (EQ)	E1		
Limited quantities (LQ)	5 kg		

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Relevant provisions of the European Union (EU)

Seveso Directive					
2012/18/EU (Seveso III)					
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the ap- plication of lower and upper-tier re- quirements	Notes		
	not assigned				

# **Deco-Paint Directive**

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VOC content	0 %
VOC content	0 g/l

# Industrial Emissions Directive (IED)

VOC content	0 %
VOC content	0 <sup>g</sup> / <sub>l</sub>

# Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)

not listed

# Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

not listed

#### Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory CA		Listed in	Remarks
Aluminium sulphate	Metals and their compounds		a)	

#### Legend

a) Indicative list of the main pollutants

# Regulation on the marketing and use of explosives precursors

not listed

#### **Regulation on drug precursors**

not listed

# Regulation on substances that deplete the ozone layer (ODS)

not listed

# Regulation concerning the export and import of hazardous chemicals (PIC)

not listed

# **Regulation on persistent organic pollutants (POP)**

not listed

# National regulations(GB)

# List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list

not listed

# **Restrictions according to GB REACH, Annex 17**

not listed

# **Other information**

Directive 94/33/EC on the protection of young people at work. Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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#### **National inventories**

Country	Inventory	Status
AU	AIIC	substance is listed
CA	DSL	substance is listed
CN	IECSC	substance is listed
EU	ECSI	substance is listed
EU	REACH Reg.	substance is listed
JP	CSCL-ENCS	substance is listed
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	substance is listed
TR	CICR	substance is listed
TW	TCSI	substance is listed
US	TSCA	substance is listed (ACTIVE)
VN	NCI	substance is listed

#### Legend

AIIC	Australian Inventory of Industrial Chemicals
CICR	Chemical Inventory and Control Regulation
CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

# 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance.

# **SECTION 16: Other information**

# Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger		yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes

# Safety data sheet Safety data sheet acc. to Regulation (EC) No. 1907/2006 (REACH)

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.2		Labelling of packages where the contents do not exceed 125 ml: change in the listing (table)	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: C2	yes
14.8		Danger label(s): 8	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Special provisions (SP): 274	yes
14.8		Excepted quantities (EQ): E1	yes
14.8		Limited quantities (LQ): 5 kg	yes
14.8		Transport category (TC): 3	yes
14.8		Hazard identification No: 80	yes
15.1	Restrictions according to REACH, Annex XVII		yes
15.1		Dangerous substances with restrictions (REACH, Annex XVII): change in the listing (table)	yes
15.1	List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list: Not listed.		yes
15.1	VOC content: 0 % 0 <sup>g</sup> / <sub>l</sub>	VOC content: 0 %	yes
15.1		VOC content: 0 <sup>g</sup> / <sub>l</sub>	yes
15.1		National regulations(GB)	yes
15.1		List of substances subject to authorisation (GB REACH, Annex 14) / SVHC - candidate list: not listed	yes
15.1		Restrictions according to GB REACH, Annex 17: not listed	yes
15.1		Other information: Directive 94/33/EC on the protection of young people at work. Observe employment restric- tions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		National inventories: change in the listing (table)	yes

# Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concern- ing the International Carriage of Dangerous Goods by Road)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identi- fier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-li- cence/)
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
GB REACH	The REACH etc. (Amendment etc.) (EU Exit) Regulations 2019, SI 2019/758 (as amended)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals

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Abbr.	Descriptions of used abbreviations
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
STEL	Short-term exposure limit
TWA	Time-weighted average
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative
WEL	Workplace exposure limit

#### Key literature references and sources for data

Agreement concerning the International Carriage of Dangerous Goods by Road (ADR). Regulations concerning the International Carriage of Dangerous Goods by Rail (RID). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

# List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H290	May be corrosive to metals.
H318	Causes serious eye damage.

#### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.