according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



#### Gallium 99,9999 %

article number: **3761**Version: **2.0 en**date of compilation: 2016-03-01
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Version: (1)

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

#### 1.1 Product identifier

Identification of the substance Gallium 99,9999 %

Article number 3761

Registration number (REACH) 01-2120762811-54-xxxx

EC number 231-163-8 CAS number 7440-55-3

## 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 Centre Beaumont Hospital	Beaumont Road	Dublin 9	+353 1 809 2166	https:// www.poisons.ie/

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.16	Substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.10	Acute toxicity (oral)	4	Acute Tox. 4	H302
4.1C	Hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

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For full text of abbreviations: see SECTION 16

### The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

#### 2.2 Label elements

# Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word	l Warning
-------------	-----------

### **Pictograms**

GHS05, GHS07



#### **Hazard statements**

H290 May be corrosive to metals H302 Harmful if swallowed

H412 Harmful to aquatic life with long lasting effects

# **Precautionary statements**

## **Precautionary statements - prevention**

P234 Keep only in original packaging
P273 Avoid release to the environment
P280 Wear protective gloves/eye protection

#### Labelling of packages where the contents do not exceed 125 ml

Signal word: Warning

Symbol(s)



H412 Harmful to aquatic life with long lasting effects.

## 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  $\geq$  0,1%.

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

#### 3.1 Substances

Name of substance Gallium

Molecular formula Ga

Molar mass  $69,72 \, {}^{9}/_{mol}$ 

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CAS No 7440-55-3

EC No 231-163-8

#### Substance, Specific Conc. Limits, M-factors, ATE

Specific Conc. Limits	M-Factors	ATE	Exposure route
-	-	500 <sup>mg</sup> / <sub>kg</sub>	oral

# **SECTION 4: First aid measures**

## 4.1 Description of first aid measures



## **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

Rinse cautiously with water for several minutes. In all cases of doubt, or when symptoms persist, seek medical advice.

#### Following ingestion

Rinse mouth with water (only if the person is conscious). Call a doctor.

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

Headache, Cough, Vomiting, Nausea, Dyspnoea

# 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, dry extinguishing powder, ABC-powder

## Unsuitable extinguishing media

water jet

# 5.2 Special hazards arising from the substance or mixture

Non-combustible.

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#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Do not allow firefighting water to enter drains or water courses. 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



## For non-emergency personnel

Avoid contact with skin, eyes and clothes. Do not breathe dust.

## 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

#### 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.

## 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. Keep only in original container.

#### **Incompatible substances or mixtures**

Observe hints for combined storage.

#### Consideration of other advice:

## 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)** 

This information is not available.

#### 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 considerable 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 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). P2 (filters at least 94 % of airborne particles, colour code: White).

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#### **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 -

Colour metallic
Odour odourless
Melting point/freezing point 29,8 °C

Boiling point or initial boiling point and boiling

range

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 (insoluble (< 1 mg/l))

Partition coefficient

Partition coefficient n-octanol/water (log value): not relevant (inorganic)

Vapour pressure not determined

Density and/or relative density

Density  $5.91 \,^{\mathrm{g}}/_{\mathrm{cm}^3}$  at 20 °C

Relative vapour density Information on this property is not available.

2.400 °C

Particle characteristics No data available.

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

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Corrosive to metals category 1: corrosive to metals

Other safety characteristics: There is no additional information.

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

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: Bases, Hydrogen peroxide, Hydrochloric acid

#### 10.4 Conditions to avoid

Humidity.

## 10.5 Incompatible materials

aluminium, different metals

## 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

# **SECTION 11: Toxicological information**

## 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Classification according to GHS (1272/2008/EC, CLP)

#### **Acute toxicity**

Harmful if swallowed.

#### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

# 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).

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#### **Aspiration hazard**

Shall not be classified as presenting an aspiration hazard.

## Symptoms related to the physical, chemical and toxicological characteristics

#### If swallowed

vomiting, nausea

# • If in eyes

Data are not available.

#### If inhaled

cough, headache, Dyspnoea

#### • If on skin

Data are not available.

#### Other information

none

## 11.2 Endocrine disrupting properties

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

#### 11.3 Information on other hazards

There is no additional information.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Harmful to aquatic life with long lasting effects.

# Aquatic toxicity (acute)

Endpoint	Value	Species	Source	Exposure time
EC50	87,03 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	ECHA	48 h
ErC50	58,58 <sup>mg</sup> / <sub>l</sub>	algae	ECHA	72 h

# 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  $\geq$  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. Avoid release to the environment. Refer to special instructions/safety data sheets.

#### 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 6** acute toxicity

HP 14 ecotoxic

#### 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 2803
IMDG-Code	UN 2803
ICAO-TI	UN 2803

#### 14.2 UN proper shipping name

ADRRID	GALLIUM
IMDG-Code	GALLIUM
ICAO-TI	Gallium

#### 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

**14.5** Environmental hazards non-environmentally hazardous acc. to the dan-

gerous goods regulations

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

14.7 Maritime transport in bulk according to IMO instruments

The cargo is not intended to be carried in bulk.

# 14.8 Information for each of the UN Model Regulations

# Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)Additional information

Proper shipping name GALLIUM

Particulars in the transport document UN2803, GALLIUM, 8, III, (E)

Classification code C10
Danger label(s) 8



Excepted quantities (EQ) E0
Limited quantities (LQ) 5 kg
Transport category (TC) 3
Tunnel restriction code (TRC) E
Hazard identification No 80

# Regulations concerning the International Carriage of Dangerous Goods by Rail (RID)Additional information

Classification code C10

Danger label(s) 8



Excepted quantities (EQ) E0
Limited quantities (LQ) 5 kg
Transport category (TC) 3
Hazard identification No 80

# International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name GALLIUM

Particulars in the shipper's declaration UN2803, GALLIUM, 8, III

Marine pollutant Danger label(s) 8



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Stowage category

Special provisions (SP)

Excepted quantities (EQ) E0

Limited quantities (LQ) 5 kg

EmS F-A, S-B

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Proper shipping name Gallium

Particulars in the shipper's declaration UN2803, Gallium, 8, III

Danger label(s) 8



Special provisions (SP) A69
Excepted quantities (EQ) E0

# **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)

Restrictions according to REACH, Annex XVII

not listed

List of substances subject to authorisation (REACH, Annex XIV)/SVHC - candidate list Not listed.

## **Seveso Directive**

2012/	2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements	Notes		
	not assigned				

#### **Deco-Paint Directive**

VOC content	0 %
VOC content	0 <sup>g</sup> / <sub>1</sub>

## **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

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# 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	CAS No	Listed in	Remarks
Gallium	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

#### 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.

#### **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
KR	KECI	substance is listed
MX	INSQ	substance is listed
NZ	NZIoC	substance is listed
PH	PICCS	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
DSL Domestic Substances List (DSL)
ECSI EC Substance Inventory (EINECS, ELINCS, NLP)

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Legend

Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances Korea Existing Chemicals Inventory

IECSC INSQ **KECI** 

NCI National Chemical Inventory
NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances
TCSI Taiwan Chemical Substance Inventory

Toxic Substance Control Act

# 15.2 Chemical safety assessment

According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.

# **SECTION 16: Other information**

# Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
1.1		EC number: 231-163-8	yes
1.1	EC number: 231-163-8	CAS number: 7440-55-3	yes
2.1		Classification according to Regulation (EC) No 1272/2008 (CLP): change in the listing (table)	yes
2.1	Remarks: For full text of Hazard- and EU Hazard-state- ments: see SECTION 16.		yes
2.1		The most important adverse physicochemical, human health and environmental effects: Spillage and fire water can cause pollution of watercourses.	yes
2.2	Signal word: Danger	Signal word: Warning	yes
2.2		Pictograms: change in the listing (table)	yes
2.2		Hazard statements: change in the listing (table)	yes
2.2		Precautionary statements - prevention: change in the listing (table)	yes
2.2	Precautionary statements - response		yes
2.2		Precautionary statements - response: change in the listing (table)	yes
2.2	Labelling of packages where the contents do not exceed 125 ml: Signal word: Danger	Labelling of packages where the contents do not exceed 125 ml: Signal word: Warning	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

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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	Other hazards: There is no additional information.	Other hazards	yes
2.3		Results of PBT and vPvB assessment: According to the results of its assessment, this substance is not a PBT or a vPvB.	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.	yes
14.1	UN number: 2803	UN number or ID number	yes
14.1		ADRRID: UN 2803	yes
14.1		IMDG-Code: UN 2803	yes
14.1		ICAO-TI: UN 2803	yes
14.2	UN proper shipping name: GALLIUM	UN proper shipping name	yes
14.2	Hazardous ingredients: Gallium		yes
14.2		ADRRID: GALLIUM	yes
14.2		IMDG-Code: GALLIUM	yes
14.2		ICAO-TI: Gallium	yes
14.3	Class: 8 (corrosive substances)		yes
14.3		ADRRID: 8	yes
14.3		IMDG-Code: 8	yes
14.3		ICAO-TI: 8	yes
14.4	Packing group: III (substance presenting low danger)	Packing group	yes
14.4		ADRRID: III	yes
14.4		IMDG-Code: III	yes
14.4		ICAO-TI: III	yes
14.5	Environmental hazards: none (non-environmentally hazardous acc. to the dangerous goods regulations)	Environmental hazards: non-environmentally hazardous acc. to the dan- gerous goods regulations	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
14.8	UN number: 2803		yes
14.8	Particulars in the transport document: UN2803, GALLIUM, (Gallium), 8, III, (E)	Particulars in the transport document: UN2803, GALLIUM, 8, III, (E)	yes
14.8	Class: 8		yes
14.8	Packing group: III		yes
14.8		Regulations concerning the International Car- riage of Dangerous Goods by Rail (RID)Addition- al information	yes
14.8		Classification code: C10	yes
14.8		Danger label(s): 8	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Excepted quantities (EQ): E0	yes
14.8		Limited quantities (LQ): 5 kg	yes
14.8		Transport category (TC):	yes
14.8		Hazard identification No: 80	yes
14.8	UN number: 2803		yes
14.8	Particulars in the shipper's declaration: UN2803, GALLIUM, (Gallium), 8, III	Particulars in the shipper's declaration: UN2803, GALLIUM, 8, III	yes
14.8	Class: 8		yes
14.8	Packing group: III		yes
14.8		Marine pollutant:	yes
14.8		International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information	yes
14.8		Proper shipping name: Gallium	yes
14.8		Particulars in the shipper's declaration: UN2803, Gallium, 8, III	yes
14.8		Danger label(s): 8	yes
14.8		Danger label(s): change in the listing (table)	yes
14.8		Special provisions (SP): A69	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
14.8		Excepted quantities (EQ): E0	yes
15.1	• Regulation 649/2012/EU concerning the export and import of hazardous chemicals (PIC):  Not listed.		yes
15.1	Regulation 1005/2009/EC on substances that deplete the ozone layer (ODS): Not listed.		yes
15.1	Regulation 850/2004/EC on persistent organic pollutants (POP):     Not listed.		yes
15.1		Seveso Directive	yes
15.1		2012/18/EU (Seveso III): change in the listing (table)	yes
15.1		Deco-Paint Directive	yes
15.1		VOC content: 0 %	yes
15.1		VOC content: 0 <sup>g</sup> / <sub>l</sub>	yes
15.1		Industrial Emissions Directive (IED)	yes
15.1		VOC content: 0 %	yes
15.1		VOC content: 0 <sup>g</sup> / <sub>l</sub>	yes
15.1	Directive 2000/60/EC establishing a framework for Community action in the field of water policy (WFD): not listed	Water Framework Directive (WFD)	yes
15.1	National inventories: Substance is listed in the following national inventories: - EINECS/ELINCS/NLP (Europe)		yes
15.1		List of pollutants (WFD): change in the listing (table)	yes
15.1		Regulation on the marketing and use of explos- ives precursors: not listed	yes
15.1		Regulation on drug precursors: not listed	yes
15.1		Regulation on substances that deplete the ozone layer (ODS): not listed	yes
15.1		Regulation concerning the export and import of hazardous chemicals (PIC): not listed	yes
15.1		Regulation on persistent organic pollutants (POP): not listed	yes

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Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
15.1		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.	yes
15.1		National inventories	yes
15.1		National inventories: change in the listing (table)	yes
15.2	Chemical Safety Assessment: No Chemical Safety Assessment has been car- ried out for this substance.	Chemical safety assessment: According to REACH, Article 14 (1) a chemical safety assessment has been carried out for this substance or components of this mixture when the substance has been registered in quantities of 10 tonnes or more per year per registrant.	yes

# **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
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 identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
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
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
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
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic

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according to Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU



#### Gallium 99,9999 %

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Abbr.	Descriptions of used abbreviations
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regula- tions concerning the International carriage of Dangerous goods by Rail)
SVHC	Substance of Very High Concern
VOC	Volatile Organic Compounds
vPvB	Very Persistent and very Bioaccumulative

# Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

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.
H302	Harmful if swallowed.
H412	Harmful to aquatic life with long lasting effects.

# Disclaimer

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

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