acc. to Safe Work Australia - Code of Practice

#### ROTI®Garose - His/Co Columns for biochemistry

article number: 1267 date of compilation: 2021-08-18 Version: GHS 2.0 en Revision: 2023-04-11

Replaces version of: 2021-08-18

Version: (GHS 1)

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

#### **Product identifier** 1.1

Identification of the substance ROTI®Garose - His/Co Columns for biochemistry

Article number 1267

#### 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 products which come into contact

with foodstuffs. Do not use for private purposes (household). Food, drink and animal feeding-

#### 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
NSW Poisons Information Centre Childrens Hospital	Hawkesbury Road	2145 West- mead, NSW	131126	

### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture 2.1

#### Classification acc. to GHS

Section	Hazard class	Cat- egory	Hazard class and category	Hazard statement
2.6	Flammable liquid	3	Flam. Liq. 3	H226
3.3	Serious eye damage/eye irritation	2A	Eye Irrit. 2A	H319
3.6	Carcinogenicity	1B	Carc. 1B	H350

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

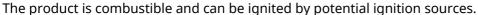
Australia (en) Page 1 / 17



acc. to Safe Work Australia - Code of Practice

#### ROTI®Garose - His/Co Columns for biochemistry

article number: 1267



#### **Label elements** 2.2

#### Labelling

Signal word Danger

#### **Pictograms**

GHS02, GHS07, GHS08







#### **Hazard statements**

Flammable liquid and vapour H226 Causes serious eye irritation H319 H350 May cause cancer

#### **Precautionary statements**

#### **Precautionary statements - prevention**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking

#### **Precautionary statements - response**

P308+P313 IF exposed or concerned: Get medical advice/attention P337+P313 If eye irritation persists: Get medical advice/attention

In case of fire: Use sand, carbon dioxide or powder extinguisher for extinction P370+P378

#### **Precautionary statements - storage**

P403+P235 Store in a well-ventilated place. Keep cool

### **Precautionary statements - disposal**

P501 Dispose of contents/container to industrial combustion plant

For professional users only

Hazardous ingredients for labelling: Cobalt powder

#### 2.3 Other hazards

Special danger of slipping by leaking/spilling product.

#### Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0.1\%$ .

#### **Endocrine disrupting properties**

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq 0.1\%$ .

Australia (en) Page 2 / 17



acc. to Safe Work Australia - Code of Practice

**ROTI®Garose - His/Co Columns for biochemistry** 

article number: 1267



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

#### 3.1 Substances

not relevant (mixture)

#### 3.2 Mixtures

#### **Description of the mixture**

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Ethanol	CAS No 64-17-5 EC No 200-578-6	≤20	Flam. Liq. 2 / H225 Eye Irrit. 2A / H319	<b>(1)</b>	
Cobalt powder	CAS No 7440-48-4 EC No 231-158-0	< 0.25	Acute Tox. 4 / H302 Eye Irrit. 2A / H319 Resp. Sens. 1 / H334 Skin Sens. 1 / H317 Muta. 2 / H341 Carc. 1B / H350 Repr. 1B / H360F	<u>(!)</u>	

For full text of abbreviations: see SECTION 16

#### **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 case of skin reactions, consult a physician.

#### Following eye contact

Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

#### Following ingestion

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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

Vomiting, Irritation

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

none

Australia (en) Page 3 / 17

acc. to Safe Work Australia - Code of Practice

**ROTI®Garose - His/Co Columns for biochemistry** 

article number: 1267



## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media



#### Suitable extinguishing media

co-ordinate firefighting measures to the fire surroundings water spray, alcohol resistant foam, dry extinguishing powder, BC-powder, carbon dioxide (CO<sub>2</sub>)

#### Unsuitable extinguishing media

water jet

#### 5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture. Solvent vapours are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

#### **Hazardous combustion products**

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)

#### 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



#### For non-emergency personnel

Use personal protective equipment as required. Avoid contact with skin, eyes and clothes. Do not breathe vapour/spray. Avoidance of ignition sources.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Danger of explosion.

### 6.3 Methods and material for containment and cleaning up

#### Advice on how to contain a spill

Covering of drains.

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

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 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.

Australia (en) Page 4 / 17

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Co Columns for biochemistry

article number: 1267



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

#### Precautions for safe handling

Provision of sufficient ventilation. Avoid exposure.

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



Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

#### Advice on general occupational hygiene

Wash hands before breaks and after work. Keep away from food, drink and animal feedingstuffs. When using do not smoke.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep in a cool place.

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

Observe hints for combined storage.

#### Consideration of other advice:

Ground/bond container and receiving equipment.

#### **Ventilation requirements**

Use local and general ventilation.

#### Specific designs for storage rooms or vessels

Recommended storage temperature: 2 - 8 °C

#### 7.3 Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

#### 8.1 **Control parameters**

#### **National limit values**

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

	ou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE [pp m]	STEL [mg/ m³]	Ceil ing- [pp m]	Ceil- ing-C [mg/ m³]	Nota- tion	Source
,	AU	ethyl alcohol (ethan- ol)	64-17-5	WES	1,00 0	1,880						WES
,	AU	cobalt	7440-48- 4	WES		0.05					df	WES

Notation

Ceiling-C

Ceiling value is a limit value above which exposure should not occur

STEL

As dust and fumes
Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15minute period (unless otherwise specified)

Australia (en) Page 5 / 17

acc. to Safe Work Australia - Code of Practice

**ROTI®Garose - His/Co Columns for biochemistry** 

article number: 1267

#### Notation

**TWA** 

Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components of the mixture							
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time	
Cobalt powder	7440-48-4	DNEL	40 μg/m³	human, inhalat- ory	worker (industry)	chronic - local ef- fects	

#### Relevant PNECs of components of the mixture Name of sub-**CAS No** End-**Threshol Environmental Exposure time Organism** stance d level point compartment 7440-48-4 $0.62 \, \mu g/I$ short-term (single Cobalt powder PNEC aquatic organfreshwater isms instance) aquatic organshort-term (single Cobalt powder 7440-48-4 **PNEC** $2.36 \, \mu g/I$ marine water instance) isms Cobalt powder 7440-48-4 **PNEC** $0.37 \frac{mg}{I}$ aquatic organsewage treatment short-term (single plant (STP) instance) 7440-48-4 53.8 <sup>mg</sup>/<sub>kg</sub> **PNEC** freshwater sedi-Cobalt powder short-term (single aquatic organisms ment instance) 69.8 <sup>mg</sup>/<sub>kg</sub> Cobalt powder 7440-48-4 **PNEC** aquatic organmarine sediment short-term (single isms instance) 10.9 <sup>mg</sup>/<sub>kg</sub> **PNEC** terrestrial organ-Cobalt powder 7440-48-4 soil short-term (single isms instance)

#### 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.

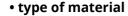
Australia (en) Page 6 / 17



acc. to Safe Work Australia - Code of Practice

#### **ROTI®Garose - His/Co Columns for biochemistry**

article number: 1267



NBR (Nitrile rubber)

#### material thickness

0,4 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: Aerosol or mist formation. Type: A (against organic gases and vapours with a boiling point of > 65 °C , colour code: Brown).

#### **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 liquid
Form viscous
Colour pink

Odour schwach Lösungsmittel

Melting point/freezing point not determined

Boiling point or initial boiling point and boiling >80 °C at 1,013 hPa

range

ig point and boiling 500 C at 1,015 in a

Flammability flammable liquid in accordance with GHS criteria

Lower and upper explosion limit not determined

Flash point >50 °C
Auto-ignition temperature >455 °C

Decomposition temperature not relevant

pH (value) 6 – 8

Kinematic viscosity not determined

Solubility(ies)

Water solubility miscible in any proportion

Partition coefficient

Partition coefficient n-octanol/water (log value): this information is not available

Australia (en) Page 7 / 17



acc. to Safe Work Australia - Code of Practice

#### **ROTI®Garose - His/Co Columns for biochemistry**

article number: 1267



Vapour pressure not determined

Density and/or relative density

Density  $\sim 0.7 \, \mathrm{g/_{cm^3}}$  at 20 °C

Relative vapour density information on this property is not available

Particle characteristics not relevant (liquid)

Other safety parameters

Oxidising properties none

9.2 Other information

Information with regard to physical hazard

classes:

There is no additional information.

Other safety characteristics:

Miscibility completely miscible with water

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

The mixture contains reactive substance(s). Risk of ignition.

#### If heated

Risk of ignition. Vapours may form explosive mixtures with air.

### 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

#### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

### 10.5 Incompatible materials

There is no additional information.

#### 10.6 Hazardous decomposition products

Hazardous combustion products: see section 5.

Australia (en) Page 8 / 17

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Co Columns for biochemistry

article number: 1267



# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Test data are not available for the complete mixture.

#### **Classification procedure**

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### Classification acc. to GHS

#### **Acute toxicity**

Shall not be classified as acutely toxic.

### Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Cobalt powder	7440-48-4	oral	550 <sup>mg</sup> / <sub>kg</sub>

#### Acute toxicity of components of the mixture

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Ethanol	64-17-5	oral	LD50	10,470 <sup>mg</sup> / <sub>kg</sub>	rat
Ethanol	64-17-5	inhalation: va- pour	LC50	124.7 <sup>mg</sup> / <sub>l</sub> /4h	rat
Cobalt powder	7440-48-4	oral	LD50	550 <sup>mg</sup> / <sub>kg</sub>	rat

### Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### 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

May cause cancer.

#### 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.

Australia (en) Page 9 / 17

acc. to Safe Work Australia - Code of Practice



article number: 1267



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

#### If swallowed

vomiting

### • If in eyes

Causes serious eye irritation

#### • If inhaled

Data are not available.

#### • If on skin

Data are not available.

#### Other information

none

### 11.2 Endocrine disrupting properties

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

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture									
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time				
Ethanol	64-17-5	LC50	15,400 <sup>mg</sup> / <sub>l</sub>	fish	96 h				
Ethanol	64-17-5	EC50	>10,000 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	48 h				
Ethanol	64-17-5	ErC50	22,000 <sup>mg</sup> / <sub>l</sub>	algae	96 h				
Cobalt powder	7440-48-4	LC50	1.512 <sup>mg</sup> / <sub>l</sub>	fish	96 h				
Cobalt powder	7440-48-4	EC50	>890 <sup>µg</sup> / <sub>l</sub>	aquatic invertebrates	48 h				
Cobalt powder	7440-48-4	ErC50	144 <sup>µg</sup> / <sub>l</sub>	algae	72 h				

Aquatic toxicity (chronic) of components of the mixture									
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time				
Ethanol	64-17-5	LC50	1,806 <sup>mg</sup> / <sub>l</sub>	aquatic invertebrates	10 d				
Ethanol	64-17-5	ErC50	675 <sup>mg</sup> / <sub>l</sub>	algae	4 d				
Cobalt powder	7440-48-4	EC50	82.2 <sup>µg</sup> / <sub>l</sub>	aquatic invertebrates	21 d				
Cobalt powder	7440-48-4	ErC50	20 <sup>µg</sup> / <sub>l</sub>	algae	70 h				

Australia (en) Page 10 / 17

acc. to Safe Work Australia - Code of Practice



article number: 1267



#### 12.2 Persistence and degradability

#### Degradability of components of the mixture

Name of substance	CAS No	Process	Degrada- tion rate	Time	Method	Source
Ethanol	64-17-5	biotic/abiotic	94 %	d		
Ethanol	64-17-5	oxygen deple- tion	69 %	5 d		ECHA
Ethanol	64-17-5	oxygen deple- tion	84 %	10 d		ECHA
Ethanol	64-17-5	oxygen deple- tion	97 %	20 d		ECHA

#### 12.3 Bioaccumulative potential

Data are not available.

#### Bioaccumulative potential of components of the mixture

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
Ethanol	64-17-5		-0.31	0.6211
Cobalt powder	7440-48-4	23		

#### 12.4 Mobility in soil

Data are not available.

#### 12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0.1\%$ .

#### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (EDC) in a concentration of  $\geq 0.1\%$ .

#### 12.7 Other adverse effects

Data are not available.

## **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

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Handle contaminated packages in the same way as the substance itself. Completely emptied packages can be recycled.

Australia (en) Page 11 / 17

acc. to Safe Work Australia - Code of Practice



article number: 1267



Relevant provisions relating to waste(Basel Convention)

Properties of waste which render it hazardous

**H3** Flammable liquids

#### 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

UN RTDG UN 1170

IMDG-Code UN 1170 ICAO-TI UN 1170

14.2 UN proper shipping name

UN RTDGETHANOL SOLUTIONIMDG-CodeETHANOL SOLUTION

ICAO-TI Ethanol solution

14.3 Transport hazard class(es)

UN RTDG 3
IMDG-Code 3
ICAO-TI 3

14.4 Packing group

UN RTDG III
IMDG-Code III
ICAO-TI III

**14.5 Environmental hazards** hazardous to the aquatic environment

Environmentally hazardous substance (aquatic Cobalt powder

environment):

#### 14.6 Special precautions for user

There is no additional information.

#### 14.7 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

Australia (en) Page 12 / 17

acc. to Safe Work Australia - Code of Practice

#### **ROTI®Garose - His/Co Columns for biochemistry**

article number: 1267

Transport informationNational regulationsAdditional information(UN RTDG)

UN number 1170 Class 3

Environmental hazards Yes

Hazardous to the aquatic environment

Packing group III

Danger label(s) 3
Fish and tree

Special provisions (SP) 144, 233

UN RTDG

Excepted quantities (EQ)

ŪN RTDG

Limited quantities (LQ) 5 L

**UN RTDG** 

Emergency Action Code 2Y

International Maritime Dangerous Goods Code (IMDG) - Additional information

Proper shipping name ETHANOL SOLUTION

Particulars in the shipper's declaration UN1170, ETHANOL SOLUTION, 3, III, >50°C c.c.,

MARINE POLLUTANT

Marine pollutant yes (hazardous to the aquatic environment)

Danger label(s) 3, "Fish and tree"





Special provisions (SP) 144, 223

Excepted quantities (EQ) E1
Limited quantities (LQ) 5 L
EmS F-E, S-D

Stowage category A

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

Proper shipping name Ethanol solution

Particulars in the shipper's declaration UN1170, Ethanol solution, 3, III

Environmental hazards yes (hazardous to the aquatic environment)

Danger label(s) 3

Special provisions (SP) A3, A58, A180

Excepted quantities (EQ) E1

Australia (en) Page 13 / 17



acc. to Safe Work Australia - Code of Practice

**ROTI®Garose - His/Co Columns for biochemistry** 

article number: 1267

Limited quantities (LQ)



## 10 L

## **SECTION 15: Regulatory information**

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

There is no additional information.

#### National regulations(Australia)

#### **Australian Inventory of Chemical Substances(AICS)**

All ingredients are listed or exempt from listing.

#### 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	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed as "ACTIVE"

#### 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 ECSI

Domestic Substances List (DSL)
EC Substance Inventory (EINECS, ELINCS, NLP)
Inventory of Existing Chemical Substances Produced or Imported in China National Inventory of Chemical Substances
Korea Existing Chemicals Inventory
New Zoaland Inventory of Chemicals INSQ

NZIOC New Zealand Inventory of Chemicals
PICCS Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg. REACH registered substances

Taiwan Chemical Substance Inventory

**Toxic Substance Control Act** 

#### 15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

Australia (en) Page 14 / 17

acc. to Safe Work Australia - Code of Practice

**ROTI®Garose - His/Co Columns for biochemistry** 

article number: 1267



## **SECTION 16: Other information**

### Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)	Safety- relev- ant
2.3	Results of PBT and vPvB assessment: This mixture does not contain any substances that are assessed to be a PBT or a vPvB.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.	yes
2.3		Endocrine disrupting properties: Does not contain an endocrine disruptor (EDC) in a concentration of ≥ 0,1%.	yes
14.8		Emergency Action Code: 2Y	yes
14.8	Marine pollutant: yes (hazardous to the aquatic environment), (Cobalt powder)	Marine pollutant: yes (hazardous to the aquatic environment)	yes
15.1		National inventories: change in the listing (table)	yes

### **Abbreviations and acronyms**

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
Carc.	Carcinogenicity
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances
Ceiling-C	Ceiling value
COD	Chemical oxygen demand
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 causir 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 ider fier of substances commercially available within the EU (European Union)
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
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid

Australia (en) Page 15 / 17

acc. to Safe Work Australia - Code of Practice

#### **ROTI®Garose - His/Co Columns for biochemistry**

article number: 1267



Abbr.	Descriptions of used abbreviations	
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	
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	
log KOW	n-Octanol/water	
Muta.	Germ cell mutagenicity	
NLP	No-Longer Polymer	
PBT	Persistent, Bioaccumulative and Toxic	
PNEC	Predicted No-Effect Concentration	
ppm	Parts per million	
Repr.	Reproductive toxicity	
Resp. Sens.	Respiratory sensitisation	
Skin Sens.	Skin sensitisation	
STEL	Short-term exposure limit	
TWA	Time-weighted average	
UN RTDG	UN Recommendations on the Transport of Dangerous Good	
vPvB	Very Persistent and very Bioaccumulative	
WES	Safe Work Australia: Workplace exposure standards for airborne contaminants	

### Key literature references and sources for data

Safe Work Australia's Code of Practice for Labelling of Workplace Hazardous Chemicals (under WHS Regulations).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### **Classification procedure**

Physical and chemical properties. The classification is based on tested mixture. Health hazards. Environmental hazards. The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Australia (en) Page 16 / 17

acc. to Safe Work Australia - Code of Practice

**ROTI®Garose - His/Co Columns for biochemistry** 

article number: 1267



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

Code	Text	
H225	Highly flammable liquid and vapour.	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H317	May cause an allergic skin reaction.	
H319	Causes serious eye irritation.	
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
H341	Suspected of causing genetic defects.	
H350	May cause cancer.	
H360F	May damage fertility.	

#### Disclaimer

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

Australia (en) Page 17 / 17