acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: **0806** Version: **GHS 1.0 en**

date of compilation: 2021-08-18

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

1.1 Product identifier

Identification of the substance

Article number

ROTI®Garose - His/Ni HPBeads plus for biochemistry

0806

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).

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

2.1 Classification of the substance or mixture

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

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

Labelling	
Signal word	Warning
Pictograms	
GHS02, GHS07	
Hazard statement	ts
H226 H319	Flammable liquid and vapour Causes serious eye irritation
Precautionary sta	tements
Precautionary sta	tements - prevention
P210	Keep away from heat/sparks/open flames/hot surfaces No smoking
Precautionary sta	tements - response
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse ski
P337+P313 P370+P378	with water or shower If eye irritation persists: Get medical advice/attention In case of fire: Use sand, carbon dioxide or powder extinguisher for extinctior
Precautionary sta	tements - storage
P403+P235	Store in a well-ventilated place. Keep cool
Precautionary sta	tements - disposal
P501	Dispose of contents/container to industrial combustion plant
Hazardous ingred	ients for labelling: Nickel powder
Other hazards	lipping by leaking/spilling product.

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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	≤ 20	Flam. Liq. 2 / H225 Eye Irrit. 2A / H319		IARC: 1

acc. to Safe Work Australia - Code of Practice



ROTI®Garose - His/Ni HPBeads plus for biochemistry

article number: 0806

Name of sub- stance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Nickel powder	CAS No 7440-02-0	< 0.25	Skin Sens. 1 / H317 Carc. 2 / H351 STOT RE 1 / H372		IARC: 2B

Notes

IARC: 1: IARC group 1: carcinogenic to humans (International Agency for Research on Cancer) IARC: IARC group 2B: possibly carcinogenic to humans (International Agency for Research on Cancer)

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 all cases of doubt, or when symptoms persist, seek medical advice.

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

Rinse mouth. Call a doctor if you feel unwell.

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

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 (CO₂)

Unsuitable extinguishing media

water jet

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

5.2 Special hazards arising from the substance or mixture

Combustible. In case of insufficient ventilation and/or in use, may form flammable/explosive vapourair 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 (CO₂)

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

Do not breathe vapour/spray. Avoid contact with skin, eyes and clothes. 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.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provision of sufficient ventilation.

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.

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

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.

Conditions for safe storage, including any incompatibilities 7.2

Keep in a cool place.

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice:

Keep container tightly closed.

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)

Cou ntr y	Name of agent	CAS No	Identi- fier	TW A [pp m]	TWA [mg/ m³]	STE L [pp m]	STEL [mg/ m³]	Ceil ing- C [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	nickel	7440-02- 0	WES		1						WES
AU	nickel	7440-02- 0	WES		1						WES

Notation

Powder Ceiling-C STEL

Ceiling value is a limit value above which exposure should not occur Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified) Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8

TWA hours time-weighted average (unless otherwise specified)

elevant 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				
Ethanol	64-17-5	DNEL	1,900 mg/ m³	human, inhalat- ory	worker (industry)	acute - systemic effects				
Ethanol	64-17-5	DNEL	343 mg/kg	human, dermal	worker (industry)	chronic - systemic effects				

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

Nouse of out	CACNIC	Find	Thursday	Ductosticus	I lead to	E
Name of sub- stance	CAS No	End- point	Threshol d level	Protection goal, route of exposure	Used in	Exposure time
Ethanol	64-17-5	DNEL	950 mg/m ³	human, inhalat- ory	worker (industry)	chronic - system effects
Nickel powder	7440-02-0	DNEL	0.05 mg/ m ³	human, inhalat- ory	worker (industry)	chronic - system effects
Nickel powder	7440-02-0	DNEL	0.05 mg/ m ³	human, inhalat- ory	worker (industry)	chronic - local e fects
Nickel powder	7440-02-0	DNEL	11.9 mg/ m ³	human, inhalat- ory	worker (industry)	acute - local ef fects
elevant PNECs	of compone	ents of th	ne mixture			
Name of sub- stance	CAS No	End- point	Threshol d level	Organism	Environmental compartment	Exposure tim
Ethanol	64-17-5	PNEC	0.79 ^{mg} / _{cm³}	unknown	marine water	intermittent re lease
Ethanol	64-17-5	PNEC	2.75 ^{mg} / _{cm³}	unknown	air	intermittent re lease
Ethanol	64-17-5	PNEC	3.6 ^{mg} / _{cm³}	unknown	freshwater sedi- ment	intermittent re lease
Ethanol	64-17-5	PNEC	580 ^{mg} / _{cm³}	unknown	sewage treatment plant (STP)	intermittent re lease
Ethanol	64-17-5	PNEC	0.63 ^{mg} / _{cm³}	unknown	soil	intermittent re lease
Ethanol	64-17-5	PNEC	0.96 ^{mg} / _{cm³}	unknown	freshwater	intermittent re lease
Nickel powder	7440-02-0	PNEC	7.1 ^{µg} / _l	aquatic organ- isms	freshwater	short-term (sing instance)
Nickel powder	7440-02-0	PNEC	8.6 ^{µg} / _l	aquatic organ- isms	marine water	short-term (sing instance)
Nickel powder	7440-02-0	PNEC	0.33 ^{mg} / _l	aquatic organ- isms	sewage treatment plant (STP)	short-term (sing instance)
Nickel powder	7440-02-0	PNEC	109 ^{mg} / _{kg}	aquatic organ- isms	freshwater sedi- ment	short-term (sing instance)
Nickel powder	7440-02-0	PNEC	109 ^{mg} / _{kg}	aquatic organ- isms	marine sediment	short-term (sing instance)
Nickel powder	7440-02-0	PNEC	29.9 ^{mg} / _{kg}	terrestrial organ- isms	soil	short-term (sing instance)

8.2 Exposure controls

Individual protection measures (personal protective equipment)

Eye/face protection



acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

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 a guide.

• type of material

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 $^{\circ}$ 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	light green
Odour	schwach Lösungsmittel
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	>80 °C
Flammability	flammable liquid in accordance with GHS criteria

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806 Lower and upper explosion limit not determined Flash point >50 °C >455 °C Auto-ignition temperature Decomposition temperature not relevant 6 - 8 pH (value) not determined Kinematic viscosity Solubility(ies) Water solubility miscible in any proportion Partition coefficient Partition coefficient n-octanol/water (log value): this information is not available not determined Vapour pressure 0.85 – 0.95 ^g/_{cm³} at 20 °C Density 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: Flammable liquids Sustained combustibility no data available 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.

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry

article number: 0806

10.3 Possibility of hazardous reactions

No known hazardous reactions.

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.

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 of component	ute toxicity of components of the mixture										
Name of substance	CAS No	Exposure route	Endpoint	Value	Species						
Ethanol	64-17-5	inhalation: va- pour	LC50	95.6 ^{mg} / _l /4h	rat						
Ethanol	64-17-5	oral	LD50	7,060 ^{mg} / _{kg}	rat						
Nickel powder	7440-02-0	oral	LD50	>9,000 ^{mg} / _{kg}	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

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).



acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

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 irritation

• If inhaled

Data are not available.

• If on skin

Data are not available.

• Other information

none

11.2 Endocrine disrupting properties

None of the ingredients are listed.

SECTION 12: Ecological information

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (a	Aquatic toxicity (acute) of components of the mixture										
Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time						
Ethanol	64-17-5	LC50	8,140 ^{mg} / _l	orfe (Leuciscus idus)	96 h						
Ethanol	64-17-5	EC50	9,000 – 14,000 ^{mg} / _l	daphnia magna	48 h						
Nickel powder	7440-02-0	LC50	15.3 ^{mg} / _l	fish	96 h						

Aquatic toxicity (chronic) of components of the mixture

Name of sub- stance	CAS No	Endpoint	Value	Species	Exposure time
Nickel powder	7440-02-0	EC50	≤108 ^{µg} / _I	aquatic invertebrates	21 d

Biodegradation

Data are not available.

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

12.2	Process of 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		

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	
Nickel powder	7440-02-0	45		

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** None of the ingredients are listed.
- **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.

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.

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

SEC	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 RTDG	ETHANOL SOLUTION			
	IMDG-Code	ETHANOL 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	non-environmentally hazardous acc. to the dan- gerous goods regulations			
14.6	Special precautions for user				
	There is no additional information.				
14.7	Transport in bulk according to Annex II of MARI	POL and the IBC Code			
	The cargo is not intended to be carried in bulk.				
14.8	Information for each of the UN Model Regulation	ons			
	Transport informationNational regulationsAdd	itional information(UN RTDG)			
	UN number	1170			
	Class	3			
	Packing group	III			
	Danger label(s)	3			

•	
Special provisions (SP)	144, 233 UN RTDG
Excepted quantities (EQ)	E1 UN RTDG
Limited quantities (LQ)	5 L UN RTDG

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

International Maritime Dangerous Goods C	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	-				
Danger label(s)	3				
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 (I	CAO-IATA/DGR) - Additional information				
Proper shipping name	Ethanol solution				
Particulars in the shipper's declaration	UN1170, Ethanol solution, 3, III				
Danger label(s)	3				
Special provisions (SP)	A3, A58, A180				
Excepted quantities (EQ)	E1				
Limited quantities (LQ)	10 L				

SECTION 15: Regulatory information

15.1 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	AICS	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

Country	Inventory	Status
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

Legend

AICS	Australian Inventory of Chemical Substances
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
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
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
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 causing 50 % changes in response (e.g. on growth) during a specified time interval
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry

® Foth

article number: **0806**

Abbr.	Descriptions of used abbreviations
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Na- tions
IARC	International Agency for Research on Cancer
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
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NLP	No-Longer Polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
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 conatminants

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).

acc. to Safe Work Australia - Code of Practice

ROTI®Garose - His/Ni HPBeads plus for biochemistry



article number: 0806

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

Code	Text
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H351	Suspected of causing cancer.
H372	Causes damage to organs through prolonged or repeated exposure.

Disclaimer

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