

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2  
Version: GHS 1.0 en

date of compilation: 2023-01-05

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

#### 1.1 Product identifier

Identification of the substance

**Multi-Element** MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

Article number

1YT2

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

Relevant identified uses:

Laboratory and analytical use  
Laboratory chemical

Uses advised against:

Do not use for squirting or spraying. Do not use for products which come into direct contact with the skin. 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 sheet: :Department Health, Safety and Environment

**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 Westmead, 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
2.16	Substance or mixture corrosive to metals	1	Met. Corr. 1	H290
3.2	Skin corrosion/irritation	1B	Skin Corr. 1B	H314
3.3	Serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.6	Carcinogenicity	1B	Carc. 1B	H350i

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### Supplemental hazard information

Code	Supplemental hazard information
EUH071	corrosive to the respiratory tract

For full text of abbreviations: see SECTION 16

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

Skin corrosion produces an irreversible damage to the skin; namely, visible necrosis through the epidermis and into the dermis.

## 2.2 Label elements

### Labelling

#### Signal word

**Danger**

#### Pictograms

GHS05, GHS08



#### Hazard statements

H290 May be corrosive to metals  
H314 Causes severe skin burns and eye damage  
H350i May cause cancer by inhalation

#### Precautionary statements

##### Precautionary statements - prevention

P260 Do not breathe dusts or mists  
P280 Wear eye protection/face protection

##### Precautionary statements - response

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P390 Absorb spillage to prevent material damage

##### Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant

For professional users only

#### Hazardous ingredients for labelling:

Nitric acid ...% [C ≤ 70 %], Beryllium nitrate

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### 2.3 Other hazards

#### 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 substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
Nitric acid ...% [C ≤ 70 %]	CAS No 7697-37-2	10	Ox. Liq. 3 / H272 Met. Corr. 1 / H290 Acute Tox. 3 / H331 Skin Corr. 1A / H314 Eye Dam. 1 / H318 EUH071		B(a)
Beryllium nitrate	CAS No 13597-99-4	< 0.5	Acute Tox. 3 / H301 Acute Tox. 2 / H330 Skin Irrit. 2 / H315 Eye Irrit. 2 / H319 Skin Sens. 1 / H317 Carc. 1B / H350i STOT SE 3 / H335 STOT RE 1 / H372		A(a) IARC: 1 RoC "Known"

#### Notes

A(a): The name of substance is a general description. It is required that the correct name is stated on the label

B(a): The classification refers to an aqueous solution

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

RoC NTP-RoC: Known To Be A Human Carcinogen

"Known"

:

For full text of abbreviations: see SECTION 16

## SECTION 4: First aid measures

### 4.1 Description of first aid measures



#### General notes

Take off immediately all contaminated clothing. Self-protection of the first aider.

#### Following inhalation

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

#### Following skin contact

After contact with skin, wash immediately with plenty of water. Immediate medical treatment required because corrosive injuries that are not treated are hard to cure.

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### Following eye contact

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

### Following ingestion

Rinse mouth immediately and drink plenty of water. Call a physician immediately. If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects). 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

Corrosion, Gastric perforation, Risk of serious damage to eyes, Risk of blindness, Cough, Dyspnoea, Pulmonary oedema

### 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 (CO<sub>2</sub>)

#### 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: Nitrogen oxides (NO<sub>x</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. Wear full chemical protective clothing.

## 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.

### 6.2 Environmental precautions

Keep away from drains, surface and ground water. The product is an acid. Before discharge into

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

sewage plants the product normally needs to be neutralised.

### 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

Provide adequate ventilation as well as local exhaust at critical locations. Use extractor hood (laboratory). Handle and open container with care. Avoid exposure. Clear contaminated areas thoroughly.

#### 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 well-ventilated place. Keep container tightly closed. Keep only in original container. May cause decomposition by long-term light influence.

#### Incompatible substances or mixtures

Observe hints for combined storage.

#### Protect against external exposure, such as

UV-radiation/sunlight, contact with air/oxygen

#### 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.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

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

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Ceiling-C [ppm]	Ceiling-C [mg/m <sup>3</sup> ]	Notation	Source
AU	beryllium compounds		WES		0.002					Be	WES
AU	selenium compounds		WES		0.1					Se	WES
AU	nitric acid	7697-37-2	WES	2	5.2	4	10				WES

#### Notation

Be	Calculated as Be (beryllium)
Ceiling-C	Ceiling value is a limit value above which exposure should not occur
Se	Calculated as Se (selenium)
STEL	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)
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)

## 8.2 Exposure controls

### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection. Wear face protection.

#### Skin protection



#### • hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. 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

FKM (fluoro rubber), Butyl caoutchouc (butyl rubber)

#### • material thickness

0,7mm

#### • breakthrough times of the glove material

>480 minutes (permeation: level 6)

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### • 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: NO-P3 (against nitrous gases and particles, colour code: Blue/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	liquid
Colour	clear
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	83 °C at 1,013 hPa
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	<2 (20 °C)
Kinematic viscosity	not determined
<u>Solubility(ies)</u>	
Water solubility	miscible in any proportion
<u>Partition coefficient</u>	
Partition coefficient n-octanol/water (log value):	not relevant (inorganic)
Vapour pressure	not determined
<u>Density and/or relative density</u>	
Density	~1 g/cm <sup>3</sup> at 20 °C
Relative vapour density	information on this property is not available

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

Particle characteristics not relevant (liquid)

### Other safety parameters

Oxidising properties none

### 9.2 Other information

Information with regard to physical hazard classes:

Corrosive to metals category 1: corrosive to metals

Other safety characteristics:

Miscibility completely miscible with water

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

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:** Acetone, Aldehydes, Alkali (lye), Alkali metals, Alcohols, Formic acid, Amines, Ammonia (NH<sub>3</sub>), Aniline, Combustible materials, Dichloromethane, Alkaline earth metal, Acetic anhydride, Hydrazine, Hydrocarbons, Metal powder, Nitriles, Reducing agents, Strong alkali, Hydrogen peroxide,  
=> Explosive properties

### 10.4 Conditions to avoid

UV-radiation/sunlight. Keep away from heat.

### 10.5 Incompatible materials

different metals

### 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.

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



# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

Acute toxicity estimate (ATE) of components of the mixture			
Name of substance	CAS No	Exposure route	ATE
Nitric acid ...% [C ≤ 70 %]	7697-37-2	inhalation: vapour	>2.65 mg/l/4h
Beryllium nitrate	13597-99-4	oral	100 mg/kg

Acute toxicity of components of the mixture					
Name of substance	CAS No	Exposure route	Endpoint	Value	Species
Nitric acid ...% [C ≤ 70 %]	7697-37-2	inhalation: vapour	LC50	>2.65 mg/l/4h	rat

### Skin corrosion/irritation

Causes severe skin burns and eye damage.

### 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

May cause cancer by inhalation.

### 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

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects)

#### • If in eyes

causes burns, Causes serious eye damage, risk of blindness

#### • If inhaled

corrosive to the respiratory tract, cough, Dyspnoea, pulmonary oedema

#### • If on skin

causes severe burns, causes poorly healing wounds

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### • 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.

### 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

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

H8 Corrosives

### 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.

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### SECTION 14: Transport information

#### 14.1 UN number

<b>UN RTDG</b>	UN 2031
IMDG-Code	UN 2031
ICAO-TI	UN 2031

#### 14.2 UN proper shipping name

<b>UN RTDG</b>	NITRIC ACID
IMDG-Code	NITRIC ACID
ICAO-TI	Nitric acid

#### 14.3 Transport hazard class(es)

<b>UN RTDG</b>	8
IMDG-Code	8
ICAO-TI	8

#### 14.4 Packing group

<b>UN RTDG</b>	II
IMDG-Code	II
ICAO-TI	II

#### 14.5 Environmental hazards

non-environmentally hazardous acc. to the dangerous goods regulations

#### 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

##### Transport information National regulations Additional information(UN RTDG)

<b>UN number</b>	2031
<b>Class</b>	8
<b>Packing group</b>	II
<b>Danger label(s)</b>	8



<b>Special provisions (SP)</b>	- UN RTDG
<b>Excepted quantities (EQ)</b>	E2 UN RTDG

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

### Limited quantities (LQ)

1 L  
UN RTDG

### Emergency Action Code

2R

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

Proper shipping name

NITRIC ACID

Particulars in the shipper's declaration

UN2031, NITRIC ACID, 8, II

Marine pollutant

-

Danger label(s)

8



Excepted quantities (EQ)

E2

Limited quantities (LQ)

1 L

EmS

F-A, S-B

Stowage category

D

### Segregation group

1 - Acids

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

Proper shipping name

Nitric acid

Particulars in the shipper's declaration

UN2031, Nitric acid, 8, II

Danger label(s)

8



Excepted quantities (EQ)

E2

Limited quantities (LQ)

0,5 L

## SECTION 15: Regulatory information

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

There is no additional information.

### 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	not all ingredients are listed
CA	DSL	not all ingredients are listed
CA	NDSL	not all ingredients are listed
CN	IECSC	not all ingredients are listed

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

Country	Inventory	Status
EU	ECSI	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	not all ingredients are listed
PH	PICCS	not 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	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
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NDSL	Non-domestic Substances List (NDSL)
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
Acute Tox.	Acute toxicity
ATE	Acute Toxicity Estimate
Carc.	Carcinogenicity
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)
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

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

Abbr.	Descriptions of used abbreviations
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
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
Met. Corr.	Substance or mixture corrosive to metals
NLP	No-Longer Polymer
NTP-RoC	National Toxicology Program: Report on Carcinogens
Ox. Liq.	Oxidising liquid
PBT	Persistent, Bioaccumulative and Toxic
ppm	Parts per million
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single 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 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).

# Safety data sheet Safety data sheet

acc. to Safe Work Australia - Code of Practice



## Multi-Element MISA ICP-OES-Standard Solution 3 ROTI®Star 16 elements in 10 % HNO<sub>3</sub>

article number: 1YT2

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

Code	Text
H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H350i	May cause cancer by inhalation.
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.