

Hazardous according to criteria of Australian Safety and Compensation Council

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

- **Product identifier**
- **Trade name: STD ZOD MULTIELEMENT**
- **Article number: N0691579**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
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Supplier/Local:  
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PerkinElmer Australia  
Lvl 2, Bldg 5, Brandon Office Park  
530-540 Springvale Road  
Glen Waverley  
Melbourne  
VIC 3150  
Australia
- **Emergency telephone number:**  
CHEMTREC (within US) 800-424-9300  
CHEMTREC (from outside US) +1 703-527-3887 (call collect)

## 2 Hazards identification

- **Classification of the substance or mixture**



Skin Irrit. 2 H315 Causes skin irritation.  
Eye Irrit. 2 H319 Causes serious eye irritation.

- **Label elements**
- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
- **Hazard pictograms** GHS07
- **Signal word** Warning
- **Hazard statements**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.
- **Precautionary statements**  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P264 Wash thoroughly after handling.  
P305+P351+P338 **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P321 Specific treatment (see on this label).  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P302+P352 **IF ON SKIN:** Wash with plenty of water.  
P362+P364 Take off contaminated clothing and wash it before reuse.

(Contd. on page 2)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 1)

· **Other hazards**

The product does not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or formaldehydes.

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

### 3 Composition/information on ingredients

· **Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

7697-37-2	Nitric Acid	Ox. Liq. 3, H272 Skin Corr. 1A, H314	2.0%
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· **Additional Components**

7440-38-2	Arsenic	Acute Tox. 3, H301; Acute Tox. 3, H331	0.005%
7440-09-7	potassium	Water-react. 1, H260 Skin Corr. 1B, H314	0.005%
1312-81-8	lanthanum oxide		0.001%
7439-93-2	lithium	Water-react. 1, H260 Skin Corr. 1B, H314	0.001%
1317-35-7	trimanganese tetraoxide		0.001%
7440-02-0	nickel	Carc. 2, H351; STOT RE 1, H372 Skin Sens. 1, H317	0.001%
10042-76-9	strontium nitrate	Ox. Sol. 2, H272	0.001%
7440-66-6	zinc	Water-react. 2, H261	0.001%
7440-39-3	barium	Water-react. 2, H261	0.0001%
7439-95-4	magnesium	Pyr. Sol. 1, H250; Water-react. 1, H260	0.0001%
7732-18-5	Water		97.9838%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### 4 First aid measures

· **Description of first aid measures**

· **General information:** Immediately remove any clothing soiled by the product.

· **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.

· **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

· **After eye contact:**

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· **After swallowing:** If symptoms persist consult doctor.

· **Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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(Contd. on page 3)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 2)

## 5 Firefighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** The product is not flammable.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

- **Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**7697-37-2 Nitric Acid**

NES	Short-term value: 10 mg/m <sup>3</sup> , 4 ppm
	Long-term value: 5.2 mg/m <sup>3</sup> , 2 ppm

- **Additional information:** The lists valid during the making were used as basis.

- **Exposure controls**

- **Personal protective equipment:**

- **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

(Contd. on page 4)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 3)

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

· **Respiratory protection:** Not required.

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Colour: Transparent

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range: 0 °C

Boiling point/Boiling range: 100 °C

· **Flash point:** Not applicable.

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Self-igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

Lower: Not determined.

(Contd. on page 5)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 4)

<b>Upper:</b>	Not determined.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C:</b>	1 g/cm <sup>3</sup>
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with water:</b>	Fully miscible.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.0 %
<b>Water:</b>	98.0 %
· <b>Solids content:</b>	0.1 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

## 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

(Contd. on page 6)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 5)

- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### 14 Transport information

· <b>UN-Number</b> · <b>ADG, IMDG, IATA</b>	UN3264
· <b>UN proper shipping name</b> · <b>ADG</b>  · <b>IMDG</b> · <b>IATA</b>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric Acid solution) CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. Corrosive liquid, acidic, inorganic, n.o.s.
· <b>Transport hazard class(es)</b>  · <b>ADG, IMDG, IATA</b> · <b>Class</b>	8 Corrosive substances.
· <b>Packing group</b> · <b>ADG, IMDG, IATA</b>	III
· <b>Environmental hazards:</b> · <b>Marine pollutant:</b>	No
· <b>Special precautions for user</b> · <b>Stowage Category</b> · <b>Stowage Code</b>	Warning: Corrosive substances. A SW2 Clear of living quarters.
· <b>Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.

(Contd. on page 7)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 6)

**· Transport/Additional information:**

**· ADG**

- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml





**· IMDG**

- **Limited quantities (LQ)** 5L
- **Excepted quantities (EQ)** Code: E1  
Maximum net quantity per inner packaging: 30 ml  
Maximum net quantity per outer packaging: 1000 ml

- **UN "Model Regulation":** UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., 8, III

**15 Regulatory information**

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

7732-18-5	Water		97.9838%
7697-37-2	Nitric Acid	 Ox. Liq. 3, H272  Skin Corr. 1A, H314	2.0%
7440-09-7	potassium	 Water-react. 1, H260  Skin Corr. 1B, H314	0.005%

- **GHS label elements** The product is classified and labelled according to the Globally Harmonised System (GHS).
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P302+P352 **IF ON SKIN:** Wash with plenty of water.  
P362+P364 Take off contaminated clothing and wash it before reuse.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations:**
- **Information about limitation of use:**  
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
- **Waterhazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

(Contd. on page 8)

**Trade name: STD ZOD MULTIELEMENT**

(Contd. of page 7)

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

### Disclaimer

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

### · Relevant phrases

H272 May intensify fire; oxidiser.

H314 Causes severe skin burns and eye damage.

### · Contact:

With in the USA: 1-(800)-762-4000

Out side the USA: 1-(203)-712-8488

### · Abbreviations and acronyms

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Ox. Liq. 3: Oxidising Liquids, Hazard Category 3

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2