

GB

#### according to 1907/2006/EC, Article 31

Printing date 04.12.2020

Revision: 04.12.2020

SECTION 1: Identification of the substance/mixture and of the company/undertaking · 1.1 Product identifier • Trade name: STD 1 MG/L EUROPIUM IN 2% HN03 · Article number: N9304227 · 1.2 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 · 1.3 Details of the supplier of the safety data sheet · Manufacturer/Supplier: PerkinElmer, Inc. 710 Bridgeport Avenue Shelton, Connecticut 06484 USA CustomerCareUS@perkinelmer.com 203-925-4600 PerkinElmer, Inc. Chalfont Road Buckinghamshire Seer Green HP9 2FX cc.uk@perkinelmer.com United Kingdom P: 0800 896 046 F: 0800-89 17 14 PerkinElmer, Inc. Llantrisant Business Park, Unit A Llantrisant CF72 8YW United Kingdom cc.uk@perkinelmer.com P: 44 1443 234005 · 1.4 Emergency telephone number: CHEMTREC (within US) 800-424-9300 CHEMTREC (from outside US) +1 703-527-3887 (call collect) CHEMTREC (within AU) +(61)-290372994 **SECTION 2: Hazards identification** · 2.1 Classification of the substance or mixture · Classification according to Regulation (EC) No 1272/2008 GHS07 Skin Irrit. 2 H315 Causes skin irritation. Eye Irrit. 2 H319 Causes serious eye irritation. · 2.2 Label elements · Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation. · Hazard pictograms GHS07 · Signal word Warning (Contd. on page 2)



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|                   | (Contd. of page 1)                                                                         |
|-------------------|--------------------------------------------------------------------------------------------|
| • Hazard stateme  | ents                                                                                       |
| H315 Causes sk    | kin irritation.                                                                            |
| H319 Causes se    | prious eye irritation.                                                                     |
| · Precautionary s | statements                                                                                 |
| P264              | Wash thoroughly after handling.                                                            |
| P280              | Wear protective gloves / eye protection / face protection.                                 |
| P305+P351+P       | 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if |
|                   | present and easy to do. Continue rinsing.                                                  |
| P332+P313         | If skin irritation occurs: Get medical advice/attention.                                   |
| P362+P364         | Take off contaminated clothing and wash it before reuse.                                   |
| P337+P313         | If eye irritation persists: Get medical advice/attention.                                  |
| · 2.3 Other hazar | rds                                                                                        |
| The product de    | pes not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds or    |
| formaldehydes.    |                                                                                            |
| <i>v</i>          | and vPvB assessment                                                                        |
| · PBT: Not appli  | cable.                                                                                     |
| · vPvB: Not appl  | icable.                                                                                    |

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

· 3.2 Chemical characterisation: Mixtures

• Description: Mixture of substances listed below with nonhazardous additions.

| nts:        |                                                  |
|-------------|--------------------------------------------------|
| Nitric Acid | Ox. Liq. 2, H272 2.0%<br>Skin Corr. 1A, H314     |
| nts         |                                                  |
| Water       | 97.9999%                                         |
| europium    | 0.0001%                                          |
|             | nts:<br>Nitric Acid<br>Ints<br>Water<br>europium |

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

# SECTION 4: First aid measures

• 4.1 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.
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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# SECTION 5: Firefighting measures

· 5.1 Extinguishing media

• Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.

- 5.2 Special hazards arising from the substance or mixture No further relevant information available.
- 5.3 Advice for firefighters
- · Protective equipment: No special measures required.

#### **SECTION 6:** Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Not required.
- 6.2 Environmental precautions: Dilute with plenty of water.
- · 6.3 Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- 6.4 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.

## SECTION 7: Handling and storage

• 7.1 Precautions for safe handling No special precautions are necessary if used correctly.

- Information about fire and explosion protection: No special measures required.
- · 7.2 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.
- 7.3 Specific end use(s) No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

7697-37-2 Nitric Acid

WEL Short-term value: 2.6 mg/m<sup>3</sup>, 1 ppm

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

- · 8.2 Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work.

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| Avoid contact with the eyes and skin.<br>• <b>Respiratory protection:</b> Not required.<br>• <b>Protection of hands:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (Contd. of page 3)                                               |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|--|
| Protective gloves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                  |  |  |
| <ul> <li>The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation</li> <li>Material of gloves</li> <li>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.</li> <li>Penetration time of glove material</li> <li>The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.</li> <li>Eye protection:</li> </ul> |                                                                  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                  |  |  |
| SECTION 9: Physical and chemi                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | cal properties                                                   |  |  |
| • 9.1 Information on basic physical and cl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | hemical properties                                               |  |  |
| • General Information                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                  |  |  |
| · Appearance:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FL.: J                                                           |  |  |
| Form:<br>Colour:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Fluid<br>Transparent                                             |  |  |
| · Odour:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Odourless                                                        |  |  |
| · Odour threshold:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Not determined.                                                  |  |  |
| · pH-value:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Not determined.                                                  |  |  |
| • Change in condition<br>Melting point/freezing point:<br>Initial boiling point and boiling range.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Undetermined.<br>: 100 °C                                        |  |  |
| · Flash point:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Not applicable.                                                  |  |  |
| · Flammability (solid, gas):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Not applicable.                                                  |  |  |
| • Decomposition temperature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Not determined.                                                  |  |  |
| • Auto-ignition temperature:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Product is not selfigniting.                                     |  |  |
| · Explosive properties:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Product does not present an explosion hazard.<br>Not determined. |  |  |
| • Explosion limits:<br>Lower:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Not determined.                                                  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (Contd. on page 5)                                               |  |  |



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| Upper:                                                                                 | Not determined.                            |                   |
| • Vapour pressure at 20 •C:                                                            | 23 hPa                                     |                   |
| · Density:                                                                             | Not determined.                            |                   |
| · Relative density                                                                     | Not determined.                            |                   |
| · Vapour density                                                                       | Not determined.                            |                   |
| · Evaporation rate                                                                     | Not determined.                            |                   |
| Solubility in / Miscibility with<br>water:     Partition coefficient: n-octanol/water: | Fully miscible.<br>Not determined.         |                   |
| · Viscosity:                                                                           |                                            |                   |
| Dynamic at 20 °C:                                                                      | 0.952 mPas                                 |                   |
| Kinematic:                                                                             | Not determined.                            |                   |
| · Solvent content:                                                                     |                                            |                   |
| Water:                                                                                 | 98.0 %                                     |                   |
| Solids content:                                                                        | 0.0 %                                      |                   |
| · 9.2 Other information                                                                | No further relevant information available. |                   |

### SECTION 10: Stability and reactivity

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

### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- · Skin corrosion/irritation
- Causes skin irritation.
- Serious eye damage/irritation
- Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- *Reproductive toxicity Based on available data, the classification criteria are not met.*
- $\cdot \textit{STOT-single exposure Based on available data, the classification criteria are not met.}$
- $\cdot$  **STOT-repeated exposure** Based on available data, the classification criteria are not met.

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• Aspiration hazard Based on available data, the classification criteria are not met.

# SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- · 12.4 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.
- · 12.5 Results of PBT and vPvB assessment
- *PBT:* Not applicable.
- **vPvB:** Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

# **SECTION 13: Disposal considerations**

· 13.1 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.

| SECTION 14 | t: Transport | t information |
|------------|--------------|---------------|
|------------|--------------|---------------|

| · 14.1 UN-Number<br>· ADR, IMDG, IATA | UN3264                                                               |
|---------------------------------------|----------------------------------------------------------------------|
| · 14.2 UN proper shipping name        |                                                                      |
| · ADR                                 | 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.                     |
| · IMDG, IATA                          | (Nitric Acid)<br>CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric |
|                                       | Acid)                                                                |
| · 14.3 Transport hazard class(es)     |                                                                      |
| ADR                                   |                                                                      |
|                                       |                                                                      |
| · Class                               | 8 (C1) Corrosive substances.                                         |
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| Label                                           | 8                                                                                                    |
| IMDG, IATA                                      |                                                                                                      |
|                                                 |                                                                                                      |
| Class                                           | 8 Corrosive substances.                                                                              |
| Label                                           | 8                                                                                                    |
| 14.4 Packing group                              |                                                                                                      |
| ADR, IMDG, IATA                                 | 111                                                                                                  |
| 14.5 Environmental hazards:                     | Not applicable.                                                                                      |
| 14.6 Special precautions for user               | Warning: Corrosive substances.                                                                       |
| Hazard identification number (Kemler code):     | 80<br>E 4 S B                                                                                        |
| EMS Number:                                     | F-A,S-B<br>Acids                                                                                     |
| Segregation groups<br>Stowage Category          | Actas<br>A                                                                                           |
| Stowage Code                                    | SW2 Clear of living quarters.                                                                        |
| 14.7 Transport in bulk according to Annex II of |                                                                                                      |
| Marpol and the IBC Code                         | Not applicable.                                                                                      |
| Transport/Additional information:               |                                                                                                      |
| ADR                                             |                                                                                                      |
| Limited quantities (LQ)                         | 5L                                                                                                   |
| Excepted quantities (EQ)                        | Code: El                                                                                             |
|                                                 | Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| Transport category                              | 3                                                                                                    |
| Tunnel restriction code                         | E                                                                                                    |
| IMDG                                            |                                                                                                      |
| Limited quantities (LQ)                         | 5L                                                                                                   |
| Excepted quantities (EQ)                        | Code: El                                                                                             |
|                                                 | 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. (NITRIC ACID), 8, III                                                                         |

| SECTION 15: Regulatory information                                                                    |       |                    |  |
|-------------------------------------------------------------------------------------------------------|-------|--------------------|--|
| · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture |       |                    |  |
| CAS: 7732-18-5<br>EINECS: 231-791-2                                                                   | Water | 97.9999%           |  |
|                                                                                                       |       | (Contd. on page 8) |  |



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|--------------------|-------------|-----------------------|------------------|
| CAS: 7697-37-2     | Nitric Acid | 🚸 Ox. Liq. 2, H272    | 2.0%             |
| EINECS: 231-714-2  |             | 🚸 Skin Corr. 1A, H314 |                  |
| CAS: 7440-53-1     | europium    |                       | 0.0001%          |
| EINECS: 231-161-7  |             |                       |                  |

· Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

· REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· National regulations:

• Waterhazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

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

# **SECTION 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.

#### · Department issuing SDS:

Environmental, Health and Safety PerkinElmer Chalfont Road Buckinghamshire Seer Green HP9 2FX United Kingdom Telephone : 0800-89 60 46 FAX : 0800-89 17 14

#### · Contact:

Within the USA: 1-(800)-762-4000 Outside the USA: 1-(203)-712-8488

# • Abbreviations and acronyms

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 GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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. 2: Oxidizing liquids – Category 2

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Skin Corr. 1A: Skin corrosion/irritation – Category 1A Skin Irrit. 2: Skin corrosion/irritation – Category 2 Eye Irrit. 2: Serious eye damage/eye irritation – Category 2 • \* Data compared to the previous version altered.