

Printing date 07/09/2018 Review date 07/09/2018

### 1 Identification

- · Product identifier
- · Trade name: PerkinElmer Pure VIII
- · Article number N9303942
- · Application of the substance / the mixture Laboratory chemicals
- 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

· Emergency telephone number:

CHEMTREC (within US) 800-424-9300

CHEMTREC (from outside US) +1 703-527-3887 (call collect)

CHEMTREC (within AU) +(61)-290372994

### 2 Hazard(s) identification

· Classification of the substance or mixture



Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

- · Label elements
- · GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms GHS05
- · Signal word Danger
- · Hazard-determining components of labeling:

Nitric Acid

· Hazard statements

H314 Causes severe skin burns and eye damage.

· Precautionary statements

P260 Do not breathe dusts or mists. P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/

shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present

and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.
 P321 Specific treatment (see on this label).
 P363 Wash contaminated clothing before reuse.

P405 Store locked up.

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P501

Dispose of contents/container in accordance with local/regional/national/international regulations.

- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 3Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



3 Health = 3

Fire = 0

· 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 characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.

| Hazardous    | components:  |          |
|--------------|--|----------|
| 7697-37-2    | Nitric Acid Ox. Liq. 2, H272   | 314 5.0% |
| Additional ( | Components   |          |
| 7440-39-3    | barium   | 0.01%    |
|              | 🔷 Water-react. 2, H261   |          |
| 7440-41-7    | beryllium  | 0.01%    |
|              | Acute Tox. 3, H301; Acute Tox. 2, H330 Carc. 1B, H350; STOT RE 1, H372 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, H335 |          |
| 7440-69-9    | bismuth  | 0.01%    |
| 7440-66-6    | zinc   | 0.01%    |
|              | 🚸 Water-react. 2, H261   |          |
| 7440-70-2    | calcium  | 0.01%    |
|              | ♦ Water-react. 2, H261   | 1        |
| 7440-43-9    | cadmium (non-pyrophoric)   | 0.01%    |
|              | 🔷 Acute Tox. 2, H330   |          |
|              | <b>♦</b> Muta. 2, H341; Carc. 1B, H350; Repr. 2, H361; STOT RE 1, H372   |          |
| 7440-48-4    |  | 0.01%    |
|              | Resp. Sens. 1, H334; Carc. 2, H351 Skin Sens. 1, H317  |          |

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| 7440-47-3  | chromium  | td. of pa<br>0.01 |
|------------|---|-------------------|
|            |   |                   |
| 7440-50-8  | **  | 0.01              |
| 7439-89-6  |   | 0.01              |
| 7440-55-3  | ♦ Skin Corr. 1C, H314   | 0.01              |
| 7440-09-7  | potassium  Water-react. 1, H260 Skin Corr. 1B, H314                           | 0.01              |
| 7439-93-2  | lithium  Water-react. 1, H260 Skin Corr. 1B, H314                             | 0.01              |
| 7439-95-4  | magnesium    Pyr. Sol. 1, H250; Water-react. 1, H260                          | 0.01              |
| 7440-23-5  | sodium  Water-react. 1, H260 Skin Corr. 1B, H314                              | 0.01              |
| 7440-24-6  | strontium  Water-react. 1, H260   | 0.01              |
| 7439-96-5  | manganese   | 0.01              |
| 7440-02-0  |   | 0.01              |
| 7439-92-1  | lead Acute Tox. 3, H301 Carc. 2, H351; Repr. 1A, H360-H362 Acute Tox. 4, H332 | 0.01              |
| 7782-49-2  | selenium  → Acute Tox. 3, H301; Acute Tox. 3, H331  → STOT RE 2, H373         | 0.01              |
| 13494-80-9 | tellurium  Acute Tox. 3, H301  Eye Irrit. 2A, H319; STOT SE 3, H335           | 0.01              |
| 7440-28-0  | thallium  Acute Tox. 2, H300; Acute Tox. 2, H330  STOT RE 2, H373             | 0.01              |
| 7440-42-8  | boron  Acute Tox. 3, H301   | 0.01              |
| 7429-90-5  | aluminium   | 0.01              |
| 7732-18-5  | Water   | 94.7              |

# 4 First-aid measures

- · Description of first aid measures · General information: Immediately remove any clothing soiled by the product.

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- 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. Then consult a doctor.
- · After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a 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.

## 5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- 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

Wear protective equipment. Keep unprotected persons away.

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/surface or ground water.

· Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 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.

· Protective Action Criteria for Chemicals

| <b>PAC-1:</b> 7697-37-2 Nitric Acid | 0.16 ppm                |
|-------------------------------------|-------------------------|
|                                     | 0.16 ppm                |
| 7440-39-3 barium                    | $1.5 \text{ mg/m}^3$    |
| 7440-41-7 beryllium                 | 0.0023 mg/m             |
| 7440-69-9 bismuth                   | 15 mg/m³                |
| 7440-66-6 zinc                      | 6 mg/m³                 |
| 7440-43-9 cadmium (non-pyrophoric)  | $0.10 \text{ mg/m}^{3}$ |
| 7440-48-4 cobalt                    | $0.18 \text{ mg/m}^3$   |
| 7440-47-3 chromium                  | 1.5 mg/m <sup>3</sup>   |
| 7440-50-8 copper                    | 3 mg/m <sup>3</sup>     |
| 7439-89-6 iron                      | 3.2 mg/m³               |
| 7440-55-3 gallium                   | $30 \text{ mg/m}^3$     |
| <del>,</del>                        | (Contd. on page         |

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| 7440-09-7  | notassium                | (Contd. of page $2.3 \text{ mg/m}^3$           |
|------------|--------------------------|--|
| 7439-93-2  | •                        | $3.3 \text{ mg/m}^3$                           |
|            | magnesium                | $\frac{3.5 \text{ mg/m}^3}{18 \text{ mg/m}^3}$ |
| 7440-23-5  | _                        | $\frac{10 \text{ mg/m}}{13 \text{ mg/m}^3}$    |
| 7440-23-5  |                          | $\frac{13 \text{ mg/m}}{30 \text{ mg/m}^3}$    |
|            | manganese                | $\frac{30 \text{ mg/m}}{3 \text{ mg/m}^3}$     |
| 7440-02-0  |                          | $4.5 \text{ mg/m}^3$                           |
| 7439-92-1  |                          | $0.15 \text{ mg/m}^3$                          |
| 7782-49-2  |                          | $0.13 \text{ mg/m}$ $0.6 \text{ mg/m}^3$       |
| 13494-80-9 |                          |  |
|            |                          | $1.8 \text{ mg/m}^3$                           |
| 7440-28-0  |                          | $0.06 \text{ mg/m}^3$                          |
| 7440-42-8  | boron                    | 1.9 mg/m³                                      |
| · PAC-2:   |                          |  |
|            | Nitric Acid              | 24 ppm   |
| 7440-39-3  |                          | 180 mg/m³                                      |
| 7440-41-7  | beryllium                | 0.025 mg/m                                     |
| 7440-69-9  | bismuth                  | 170 mg/m³                                      |
| 7440-66-6  | zinc                     | 21 mg/m³                                       |
| 7440-43-9  | cadmium (non-pyrophoric) | $0.76 \text{ mg/m}^3$                          |
| 7440-48-4  | cobalt                   | $2 mg/m^3$                                     |
| 7440-47-3  | chromium                 | $17 \text{ mg/m}^3$                            |
| 7440-50-8  | copper                   | 33 mg/m³                                       |
| 7439-89-6  | iron                     | 35 mg/m³                                       |
| 7440-55-3  | gallium                  | 330 mg/m³                                      |
| 7440-09-7  | potassium                | 25 mg/m³                                       |
| 7439-93-2  | lithium                  | 36 mg/m³                                       |
| 7439-95-4  | magnesium                | 200 mg/m³                                      |
| 7440-23-5  | sodium                   | 140 mg/m³                                      |
| 7440-24-6  | strontium                | 330 mg/m³                                      |
| 7439-96-5  | manganese                | $5 \text{ mg/m}^3$                             |
| 7440-02-0  |                          | $50 \text{ mg/m}^3$                            |
| 7439-92-1  |                          | $120 \text{ mg/m}^3$                           |
| 7782-49-2  |                          | $6.6 \text{ mg/m}^3$                           |
| 13494-80-9 |                          | $20 \text{ mg/m}^3$                            |
| 7440-28-0  |                          | $3.3 \text{ mg/m}^3$                           |
| 7440-42-8  |                          | $\frac{21 \text{ mg/m}^3}{}$                   |
| · PAC-3:   |                          | .8   |
|            | Nitric Acid              | 92 ppm   |
| 7440-39-3  |                          | 1,100 mg/m                                     |
| 7440-39-3  |                          | $0.1 \text{ mg/m}^3$                           |
| /440-41-/  | <i>оегунит</i>           | (Contd. on page                                |



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| 7440 (0 0 1:     |                       | (Contd. of page      |
|------------------|-----------------------|----------------------|
| 7440-69-9 bisn   |                       | $990 \text{ mg/m}^3$ |
| 7440-66-6 zinc   |                       | $120 \text{ mg/m}^3$ |
| 7440-43-9 cadi   | nium (non-pyrophoric) | $4.7 \text{ mg/m}^3$ |
| 7440-48-4 cob    | ılt                   | $20 \text{ mg/m}^3$  |
| 7440-47-3 chr    | mium                  | 99 mg/m³             |
| 7440-50-8 copp   | oer                   | $200 \text{ mg/m}^3$ |
| 7439-89-6 iron   |                       | $150 \text{ mg/m}^3$ |
| 7440-55-3 gall   | ium                   | 2,000 mg/m           |
| 7440-09-7 pote   | ssium                 | $150 \text{ mg/m}^3$ |
| 7439-93-2 lithi  | um                    | $220 \text{ mg/m}^3$ |
| 7439-95-4 mag    | nesium                | 1,200 mg/m           |
| 7440-23-5 sodi   | um                    | $870 \text{ mg/m}^3$ |
| 7440-24-6 stro   | ntium                 | 2,000 mg/m           |
| 7439-96-5 man    | ganese                | 1,800 mg/m           |
| 7440-02-0 nick   | el                    | 99 mg/m³             |
| 7439-92-1 lead   |                       | $700 \text{ mg/m}^3$ |
| 7782-49-2 sele   | nium                  | $40 \text{ mg/m}^3$  |
| 13494-80-9 telli | rium                  | $110 \text{ mg/m}^3$ |
| 7440-28-0 thal   | lium                  | 20 mg/m³             |
| 7440-42-8 bore   |                       | $130 \text{ mg/m}^3$ |

# 7 Handling and storage

- · Handling:
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- Information about protection against explosions and fires: No special measures required.
- · 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 receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

## 8 Exposure controls/personal protection

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

7697-37-2 Nitric Acid

PEL Long-term value: 5 mg/m³, 2 ppm

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REL Short-term value: 10 mg/m³, 4 ppm Long-term value: 5 mg/m³, 2 ppm TLV Short-term value: 10 mg/m³, 4 ppm Long-term value: 5.2 mg/m³, 2 ppm

- · Additional information: The lists that were valid during the creation 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.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

- · Breathing equipment: Not required.
- Protection of hands:



Protective gloves

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

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles or safety glasses

## 9 Physical and chemical properties

- · Information on basic physical and chemical properties
- General Information
- · Appearance:

Form: Liquid
Color: Dark brown
Odor: Characteristic
Odor threshold: Not determined.

· pH-value: Not determined.

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|   |   | (Contd. of page |
|---|---|-----------------|
| · Change in condition                   |   |                 |
| Melting point/Melting range:            | Undetermined.                                 |                 |
| Boiling point/Boiling range:            | Undetermined.                                 |                 |
| · Flash point:                          | Not applicable.                               |                 |
| · Flammability (solid, gaseous):        | Not applicable.                               |                 |
| Decomposition temperature:              | Not determined.                               |                 |
| · Auto igniting:                        | Product is not selfigniting.                  |                 |
| Danger of explosion:                    | Product does not present an explosion hazard. |                 |
| · Explosion limits:                     |   |                 |
| Lower:                                  | Not determined.                               |                 |
| Upper:                                  | Not determined.                               |                 |
| · Vapor pressure at 20 °C (68 °F):      | 23 hPa (17.3 mm Hg)                           |                 |
| · Density:                              | Not determined.                               |                 |
| Relative density                        | Not determined.                               |                 |
| · Vapor density                         | Not determined.                               |                 |
| Evaporation rate                        | Not determined.                               |                 |
| · Solubility in / Miscibility with      |   |                 |
| Water:                                  | Not miscible or difficult to mix.             |                 |
| · Partition coefficient (n-octanol/wate | r): Not determined.                           |                 |
| · Viscosity:                            |   |                 |
| Dynamic:                                | Not determined.                               |                 |
| Kinematic:                              | Not determined.                               |                 |
| · Solvent content:                      |   |                 |
| Water:                                  | 94.8 %  |                 |
| VOC content:                            | 0.00 %  |                 |
| · Other information                     | 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.

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## 11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: Caustic effect on skin and mucous membranes.
- · on the eye:

Strong caustic effect.

Strong irritant with the danger of severe eye injury.

- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Corrosive

Irritant

Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

· Carcinogenic categories

| · IARC (Inte | ernational Agency for Research on Cancer)     |          |
|--------------|---|----------|
| 7440-41-7    | beryllium                                     | 1        |
| 7440-43-9    | cadmium (non-pyrophoric)                      | 1        |
| 7440-48-4    | cobalt  | 2B       |
| 7440-47-3    | chromium                                      | 3        |
| 7440-02-0    | nickel  | 2B       |
| 7439-92-1    | lead  | 2B       |
| 7782-49-2    | selenium                                      | 3        |
| · NTP (Nati  | onal Toxicology Program)                      |          |
| 7440-41-7    | beryllium                                     | K        |
| 7440-43-9    | cadmium (non-pyrophoric)                      | K        |
| 7440-48-4    | cobalt  | R        |
| 7440-02-0    | nickel  | R        |
| 7439-92-1    | lead  | R        |
| · OSHA-Ca    | (Occupational Safety & Health Administration) | <u>'</u> |
| 7440-43-9    | cadmium (non-pyrophoric)                      |          |

# 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.

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- · Additional ecological information:
- · General notes:

Generally not hazardous for water

Must not reach bodies of water or drainage ditch undiluted or unneutralized.

- · 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:

Dispose of container and materials in accordance with local, regional and national regulations.

- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

| 7 4 | 70    |      | • /  | r    | 2 · |
|-----|-------|------|------|------|-----|
| 1/1 | Trans | nart | 7707 | OPMA | TON |
|     |       |      |      |      | 7   |
|     |       |      |      |      |     |

|      |     | _   |
|------|-----|-----|
| IIN. | Num | hør |

· DOT, ADR, IMDG, IATA UN3264

· UN proper shipping name

 $\cdot DOT$ 

 $\cdot ADR$ 

Corrosive liquid, acidic, inorganic, n.o.s. (nitric acid) 3264 Corrosive liquid, acidic, inorganic, n.o.s. (nitric acid)

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid) · IMDG, IATA

- · Transport hazard class(es)
- $\cdot DOT$



· Class 8 Corrosive substances

· Label

 $\cdot ADR$ 



Class 8 (C1) Corrosive substances

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|   | (Contd. of page  |
|---|--|
| Label   | 8  |
| IMDG, IATA  |  |
| 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1                             |  |
| Class   | 8 Corrosive substances   |
| Label   | 8  |
| Packing group   |  |
| DOT, ADR, IMDG, IATA  | III  |
| Environmental hazards:  |  |
| Marine pollutant:   | No   |
| Special precautions for user                                      | Warning: Corrosive substances  |
| Danger code (Kemler):   | 80   |
| EMS Number:   | F-A,S-B  |
| Segregation groups<br>Stowage Category                            | Acids<br>A   |
| Stowage Code  | SW2 Clear of living quarters.  |
|   |  |
| Transport in bulk according to Annex MARPOL73/78 and the IBC Code | Not applicable.  |
| Transport/Additional information:                                 |  |
| DOT   |  |
| Quantity limitations  | On passenger aircraft/rail: 5 L  |
|   | On cargo aircraft only: 60 L   |
| ADR   |  |
| 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<br>Code: E1   |
| Excepted quantities (EQ)  | Code: E1 Maximum net quantity per inner packaging: 30 ml   |
|   | Maximum net quantity per inner packaging: 30 ml<br>Maximum net quantity per outer packaging: 1000 ml |
| TINI HAM. J.J.D J   | 1 71 1 0 0   |
| UN "Model Regulation":  | UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O. (NITRIC ACID), 8, III                              |

|           | ory information  |             |
|-----------|--|-------------|
|           | alth and environmental regulations/legislation specific for the substance or mixture | T a . = .a. |
| 7732-18-5 |  | 94.76%      |
| 7697-37-2 | Nitric Acid  | 5.0%        |
|           | © Ox. Liq. 2, H272<br>Skin Corr. 1A, H314  |             |
|           | ♦ Skin Corr. 1A, H314  |             |
|           | (Contd.  | on page 12  |



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|--|-----------------|
| 7440-41-7 beryllium  | 0.01            |
| Acute Tox. 3, H301; Acute Tox. 2, H330 Carc. 1B, H350; STOT RE 1, H372   |                 |
| Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Skin Sens. 1, H317; STOT SE 3, | H335            |
| Sara   |                 |
| Section 355 (extremely hazardous substances):                            |                 |
| 7697-37-2 Nitric Acid  |                 |
| 13494-80-9 tellurium   |                 |
| Section 313 (Specific toxic chemical listings):                          |                 |
| 7697-37-2 Nitric Acid  |                 |
| 7440-39-3 barium   |                 |
| 7440-41-7 beryllium  |                 |
| 7440-66-6 zinc   |                 |
| 7440-43-9 cadmium (non-pyrophoric)                                       |                 |
| 7440-48-4 cobalt   |                 |
| 7440-47-3 chromium   |                 |
| 7440-50-8 copper   |                 |
| 7439-96-5 manganese  |                 |
| 7440-02-0 nickel   |                 |
| 7439-92-1 lead   |                 |
| 7782-49-2 selenium   |                 |
| 7440-28-0 thallium   |                 |
| 7429-90-5 aluminium  |                 |
| TSCA (Toxic Substances Control Act):                                     |                 |
| All ingredients are listed.  |                 |
| 7697-37-2 Nitric Acid  |                 |
| 7440-39-3 barium   |                 |
| 7440-41-7 beryllium  |                 |
| 7440-69-9 bismuth  |                 |
| 7440-66-6 zinc   |                 |
| 7440-70-2 calcium  |                 |
| 7440-43-9 cadmium (non-pyrophoric)                                       |                 |
| 7440-48-4 cobalt   |                 |
| 7440-47-3 chromium   |                 |
| 7440-50-8 copper   |                 |
| 7439-89-6 iron   |                 |
| 7440-55-3 gallium  |                 |
| 7440-09-7 potassium  |                 |
| 7439-93-2 lithium  |                 |
| 7439-95-4 magnesium  | (Contd. on page |

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Trade name: PerkinElmer Pure VIII

|               |   | (Contd. of page 1       |
|---------------|---|-------------------------|
| 7440-23       | sodium  |                         |
|               | strontium   |                         |
| 7439-96       | manganese   |                         |
| 7440-02-0     | nickel  |                         |
| 7439-92-      | l lead  |                         |
| 7782-49-2     | ? selenium  |                         |
| 13494-80-9    | tellurium   |                         |
| 7440-28-0     | thallium  |                         |
| 7440-42-6     | Bboron  |                         |
| 7429-90       | aluminium   |                         |
| 7732-18       | 5 Water   |                         |
| · Proposition | 1 65  |                         |
| · Chemicals   | known to cause cancer:                            |                         |
| 7440-41-7     | beryllium   |                         |
| 7440-43-9     | cadmium (non-pyrophoric)                          |                         |
| 7440-48-4     | cobalt  |                         |
| 7440-02-0     | nickel  |                         |
| 7439-92-1     | lead  |                         |
| · Chemicals   | known to cause reproductive toxicity for females: |                         |
| 7439-92-1     | lead  |                         |
| · Chemicals   | known to cause reproductive toxicity for males:   |                         |
| 7440-43-9     | cadmium (non-pyrophoric)                          |                         |
| 7439-92-1     | lead  |                         |
| · Chemicals   | known to cause developmental toxicity:            |                         |
|               | cadmium (non-pyrophoric)                          |                         |
| 7439-92-1     | , , , ,   |                         |
| · Canceroge   | nity categories                                   |                         |
|               | ronmental Protection Agency)                      |                         |
| 7440-39-3     | - · · · · · · · · · · · · · · · · · · ·           | D, CBD(inh), NL(oral)   |
| 7440-41-7     | bervllium   | B1, K/L(inh), CBD(oral, |
| 7440-66-6     |   | D, I, II                |
|               | cadmium (non-pyrophoric)                          | BI                      |
| 7440-47-3     |   | D                       |
| 7440-50-8     |   | D                       |
|               | manganese   | D                       |
| 7439-92-1     |   | B2                      |
| 7782-49-2     |   | D                       |
| 7440-42-8     |   | I (oral)                |
| 7 7 70 72-0   |   | (Contd. on page 1       |

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|           |   | (Contd. of page 13) |
|-----------|---|---------------------|
| TLV (Thre | shold Limit Value established by ACGIH)                 |                     |
| 7440-39-3 | barium  | A4                  |
| 7440-41-7 | beryllium   | Al                  |
| 7440-43-9 | cadmium (non-pyrophoric)                                | A2                  |
| 7440-48-4 | cobalt  | A3                  |
| 7440-47-3 | chromium  | A4                  |
| 7440-02-0 | nickel  | A5                  |
| 7439-92-1 | lead  | A3                  |
| 7429-90-5 | aluminium   | A4                  |
| NIOSH-Co  | (National Institute for Occupational Safety and Health) |                     |
| 7440-41-7 | beryllium   |                     |
| 7440-43-9 | cadmium (non-pyrophoric)                                |                     |
| 7440-02-0 | nickel  |                     |
|           |   |                     |

- · 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

- · Water hazard class: Generally not hazardous for water.
- · 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 shall not be held liable for any damage resulting from handling or from contact with the product.

· Department issuing SDS: Environmental, Health and Safety

· Contact:

Within the USA: 1-(800)-762-4000 *Outside 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

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

(Contd. on page 15)



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NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value
PEL: Permissible Exposure Limit
REL: Recommended Exposure Limit
Ox. Liq. 2: Oxidizing liquids – Category 2

Skin Corr. 1A: Skin corrosion/irritation – Category 1A Skin Corr. 1B: Skin corrosion/irritation – Category 1B Eye Dam. 1: Serious eye damage/eye irritation – Category 1

\* Data compared to the previous version altered.

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