



# SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:  
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 24-Jul-2024

Revision Number 2.01

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

### 1.1. Product identifier

**Product Code(s)** 5190-9766  
**Product Name** ICH/USP Target Elements Standard A  
**Form** Not applicable  
**Pure substance/mixture** Mixture

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

**Recommended use** Reagents and Standards for Analytical Chemical Laboratory Use

**Uses advised against**

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Agilent Technologies LDA UK Ltd.  
5500 Lakeside Cheadle Royal Business Park,  
Cheadle, Cheshire, SK8 3GR  
United Kingdom

+44 (0) 345 712 5292

For further information, please contact

**E-mail address** pdl-msds\_author@agilent.com

### 1.4. Emergency telephone number

**Emergency Telephone** CHEMTREC®: +44 20 3807 3798

Emergency Telephone - §45 - (EC)1272/2008	
Europe	112
Austria	No information available
Bulgaria	
Croatia	
Cyprus	
Czech Republic	
Denmark	
France	

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Hungary	
Ireland	
Italy	
Lithuania	
Luxembourg	
Netherlands	
Norway	
Portugal	
Romania	
Slovakia	
Slovenia	
Spain	
Sweden	
Switzerland	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to  
Regulation (EC) No. 1272/2008 [CLP]

<b>Skin corrosion/irritation</b>	Category 2 - (H315)
<b>Serious eye damage/eye irritation</b>	Category 2 - (H319)
<b>Chronic aquatic toxicity</b>	Category 3 - (H412)
<b>Corrosive to metals</b>	Category 1 - (H290)

### 2.2. Label elements



**Signal word**  
Warning

#### Hazard statements

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H412 - Harmful to aquatic life with long lasting effects  
H290 - May be corrosive to metals  
EUH071 - Corrosive to the respiratory tract

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### Precautionary Statements - EU (§28, 1272/2008)

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves and eye/face protection

P337 + P313 - If eye irritation persists: Get medical advice/attention

P234 - Keep only in original container

P406 - Store in corrosion resistant stainless steel container with a resistant inner liner

P501 - Dispose of contents/ container to an approved waste disposal plant

### 2.3. Other hazards

Harmful to aquatic life.

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

**Endocrine Disruptor Information** This product does not contain any known or suspected endocrine disruptors.

Chemical name	EU - REACH (1907/2006) - Article 59(1) - Candidate List of Substances of Very High Concern (SVHC) for Authorisation	EU - REACH (1907/2006) - Endocrine Disruptor Assessment List of Substances
Nitric Acid	-	-
Mercury	-	-
Arsenic	-	-
Lead	-	-
Cadmium	-	-

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not applicable

### 3.2 Mixtures

**Chemical nature** aqueous solution.

Chemical name	Weight-%	REACH registration number	EC No (EU Index No)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)
Nitric Acid 7697-37-2	1 - <3	-	231-714-2	Met. Corr. 1 (H290) Ox. Liq. 2 (H272) Acute Tox. 3 (H331) Skin Corr. 1A (H314) (EUH071)	Ox. Liq. 2 :: C>=99% Ox. Liq. 3 :: C>=65% Skin Corr. 1A :: C>=20%		

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					Skin Corr. 1B :: 5%≤C<20%		
Mercury 7439-97-6	<0.1	-	231-106-7 (080-001-00 -0)	Acute Tox. 2 (H330) Repr. 1B (H360D) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	STOT RE 2 :: C>=0.1%		
Arsenic 7440-38-2	<0.1	-	231-148-6 (033-001-00 -X)	Acute Tox. 3 (H301) Acute Tox. 3 (H331) Carc. 1A (H350) Repr. 1A (H360) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)			
Lead 7439-92-1	<0.1	-	231-100-4 (082-014-00 -7)	Carc. 2 (H351) Repr. 1A (H360FD) Lact. (H362) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Repr. 1A :: C>=0.03%	1	10
Cadmium 7440-43-9	<0.1	-	231-152-8 (048-002-00 -0)	Acute Tox. 4 (H302) Acute Tox. 2 (H330) Muta. 2 (H341) Carc. 1B (H350) Repr. 2 (H361fd) STOT RE 1 (H372) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)			

**Full text of H- and EUH-phrases: see section 16**

#### Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Nitric Acid	No data	No data available	No data available	2.65	No data available

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Chemical name	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
7697-37-2	available				
Arsenic 7440-38-2	15	No data available	No data available	No data available	No data available
Cadmium 7440-43-9	1140	No data available	No data available	No data available	No data available

### Additional information

The concentration of the acid stated in this SDS is calculated as an absolute mass concentration (%w/v). This is less than the acid concentration stated on the product label and COA, which reflects a percent value of the commercially available concentrated aqueous form of the acid.

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

<b>General advice</b>	Show this safety data sheet to the doctor in attendance.
<b>Inhalation</b>	Remove to fresh air. Get medical attention immediately if symptoms occur.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a doctor.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** May cause redness and tearing of the eyes. Burning sensation.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to doctors** Treat symptomatically.

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## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

**Suitable Extinguishing Media** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Large Fire** CAUTION: Use of water spray when fighting fire may be inefficient.

**Unsuitable extinguishing media** Do not scatter spilled material with high pressure water streams.

### **5.2. Special hazards arising from the substance or mixture**

**Specific hazards arising from the chemical** No information available.

### **5.3. Advice for firefighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

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

### **6.1. Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Use personal protective equipment as required.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

### **6.2. Environmental precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so.

### **6.3. Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

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### 6.4. Reference to other sections

**Reference to other sections** See section 8 for more information. See section 13 for more information.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse.

**General hygiene considerations** Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Please refer to the manufacturer's certificate for specific storage and transport temperature conditions. Store only in the original receptacle unless other advice is given on the CoA. Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Store locked up. Keep out of the reach of children. Store away from other materials.

### 7.3. Specific end use(s)

**Risk Management Methods (RMM)** The information required is contained in this Safety Data Sheet.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure Limits

Chemical name	European Union	Austria	Belgium	Bulgaria	Croatia
Nitric Acid 7697-37-2	-	STEL 1 ppm STEL 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>
Mercury 7439-97-6	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> STEL 0.08 mg/m <sup>3</sup> Sk* Sh+	TWA: 0.02 mg/m <sup>3</sup> Sk*	TWA: 0.05 mg/m <sup>3</sup> TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>
Arsenic	-	-	TWA: 0.01 mg/m <sup>3</sup>	-	TWA: 0.1 mg/m <sup>3</sup>

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7440-38-2					
Lead 7439-92-1	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> STEL 0.4 mg/m <sup>3</sup>	-	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>
Cadmium 7440-43-9	TWA: 0.001 mg/m <sup>3</sup>	-	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>Cyprus</b>	<b>Czech Republic</b>	<b>Denmark</b>	<b>Estonia</b>	<b>Finland</b>
Nitric Acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> Ceiling: 2.5 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	TWA: 0.5 ppm TWA: 1.3 mg/m <sup>3</sup> STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>
Mercury 7439-97-6	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> Sk* Ceiling: 0.15 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> STEL: 0.04 mg/m <sup>3</sup> Sk*	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> Sk*
Arsenic 7440-38-2	-	TWA: 0.1 mg/m <sup>3</sup> Ceiling: 0.4 mg/m <sup>3</sup>	TWA: 0.0028 mg/m <sup>3</sup> STEL: 0.0056 mg/m <sup>3</sup>	TWA: 0.03 mg/m <sup>3</sup> TWA: 0.01 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup>
Lead 7439-92-1	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> Ceiling: 0.2 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> STEL: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>
Cadmium 7440-43-9	TWA: 0.001 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup> Sk* Ceiling: 0.008 mg/m <sup>3</sup>	TWA: 0.001 mg/m <sup>3</sup> STEL: 0.002 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>France</b>	<b>Germany TRGS</b>	<b>Germany DFG</b>	<b>Greece</b>	<b>Hungary</b>
Nitric Acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 2.6 mg/m <sup>3</sup>	-	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 2.6 mg/m <sup>3</sup> STEL: 1 ppm
Mercury 7439-97-6	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> Sk* Sh+	TWA: 0.02 mg/m <sup>3</sup> Peak: 0.16 mg/m <sup>3</sup> Sk* skin sensitizer	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> Sk* sz+
Arsenic 7440-38-2	-	-	-	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> Sk*
Lead 7439-92-1	TWA: 0.1 mg/m <sup>3</sup>	-	TWA: 0.004 mg/m <sup>3</sup> Peak: 0.032 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> TWA: 0.05 mg/m <sup>3</sup>
Cadmium 7440-43-9	TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.002 mg/m <sup>3</sup>	Sk*	TWA: 0.001 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>Ireland</b>	<b>Italy MDLPS</b>	<b>Italy AIDII</b>	<b>Latvia</b>	<b>Lithuania</b>
Nitric Acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 5.2 mg/m <sup>3</sup> STEL: 4 ppm STEL: 10.3 mg/m <sup>3</sup>	TWA: 0.78 ppm TWA: 2 mg/m <sup>3</sup> STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>
Mercury 7439-97-6	TWA: 0.02 mg/m <sup>3</sup> STEL: 0.06 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> Sk*	TWA: 0.025 mg/m <sup>3</sup> Sk*	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>
Arsenic 7440-38-2	TWA: 0.01 mg/m <sup>3</sup> STEL: 0.03 mg/m <sup>3</sup>	-	TWA: 0.01 mg/m <sup>3</sup>	-	-
Lead 7439-92-1	TWA: 0.15 mg/m <sup>3</sup> STEL: 0.45 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> STEL: 0.1 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup> TWA: 0.07 mg/m <sup>3</sup>
Cadmium	TWA: 0.001 mg/m <sup>3</sup>	TWA: 0.001 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup>	TWA: 0.001 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>

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7440-43-9	TWA: 0.004 mg/m <sup>3</sup> STEL: 0.003 mg/m <sup>3</sup> STEL: 0.012 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>			
<b>Chemical name</b>	<b>Luxembourg</b>	<b>Malta</b>	<b>Netherlands</b>	<b>Norway</b>	<b>Poland</b>
Nitric Acid 7697-37-2	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 0.5 ppm STEL: 1.3 mg/m <sup>3</sup>	TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> STEL: 4 ppm STEL: 10 mg/m <sup>3</sup>	TWA: 1.4 mg/m <sup>3</sup> STEL: 2.6 mg/m <sup>3</sup>
Mercury 7439-97-6	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.02 mg/m <sup>3</sup> STEL: 0.06 mg/m <sup>3</sup> A+	TWA: 0.02 mg/m <sup>3</sup> Sk*
Arsenic 7440-38-2	-	-	TWA: 0.28 µg/m <sup>3</sup>	TWA: 0.005 mg/m <sup>3</sup> STEL: 0.015 mg/m <sup>3</sup> Sk*	TWA: 0.01 mg/m <sup>3</sup>
Lead 7439-92-1	TWA: 0.15 mg/m <sup>3</sup>	-	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup> STEL: 0.15 mg/m <sup>3</sup>	TWA: 0.05 mg/m <sup>3</sup>
Cadmium 7440-43-9	-	-	TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.001 mg/m <sup>3</sup> STEL: 0.003 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>Portugal</b>	<b>Romania</b>	<b>Slovakia</b>	<b>Slovenia</b>	<b>Spain</b>
Nitric Acid 7697-37-2	TWA: 2 ppm STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	Ceiling: 2.6 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 2.6 mg/m <sup>3</sup> STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>
Mercury 7439-97-6	TWA: 0.02 mg/m <sup>3</sup> Sk*	TWA: 0.02 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> Sk* S+	TWA: 0.02 mg/m <sup>3</sup> STEL: 0.16 mg/m <sup>3</sup> Sk*	TWA: 0.02 mg/m <sup>3</sup>
Arsenic 7440-38-2	TWA: 0.01 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> STEL: 0.1 mg/m <sup>3</sup>	-	-	TWA: 0.01 mg/m <sup>3</sup>
Lead 7439-92-1	TWA: 0.05 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup> TWA: 0.5 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> STEL: 0.4 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup>
Cadmium 7440-43-9	TWA: 0.001 mg/m <sup>3</sup> TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.001 mg/m <sup>3</sup>	TWA: 0.03 mg/m <sup>3</sup> TWA: 0.15 mg/m <sup>3</sup> STEL: 0.15 mg/m <sup>3</sup> STEL: 0.75 mg/m <sup>3</sup>	TWA: 0.004 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> TWA: 0.002 mg/m <sup>3</sup>
<b>Chemical name</b>	<b>Sweden</b>		<b>Switzerland</b>	<b>United Kingdom</b>	
Nitric Acid 7697-37-2	NGV: 0.5 ppm NGV: 1.3 mg/m <sup>3</sup> Bindande KGV: 1 ppm Bindande KGV: 2.6 mg/m <sup>3</sup>		TWA: 2 ppm TWA: 5 mg/m <sup>3</sup> STEL: 2 ppm STEL: 5 mg/m <sup>3</sup>	STEL: 1 ppm STEL: 2.6 mg/m <sup>3</sup>	
Mercury 7439-97-6	NGV: 0.02 mg/m <sup>3</sup>		TWA: 0.005 ppm TWA: 0.05 mg/m <sup>3</sup> STEL: 0.04 ppm STEL: 0.4 mg/m <sup>3</sup> Sk* S+	TWA: 0.02 mg/m <sup>3</sup> STEL: 0.06 mg/m <sup>3</sup>	



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Arsenic 7440-38-2	NGV: 0.01 mg/m <sup>3</sup>	TWA: 0.01 mg/m <sup>3</sup> Sk*	TWA: 0.1 mg/m <sup>3</sup> STEL: 0.3 mg/m <sup>3</sup>
Lead 7439-92-1	NGV: 0.1 mg/m <sup>3</sup> NGV: 0.05 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup> STEL: 0.8 mg/m <sup>3</sup>	TWA: 0.15 mg/m <sup>3</sup> STEL: 0.45 mg/m <sup>3</sup>
Cadmium 7440-43-9	NGV: 0.001 mg/m <sup>3</sup> NGV: 0.004 mg/m <sup>3</sup>	TWA: 0.001 mg/m <sup>3</sup> Sk*	TWA: 0.025 mg/m <sup>3</sup> STEL: 0.075 mg/m <sup>3</sup>

### Biological occupational exposure limits

Chemical name	European Union	Austria	Bulgaria	Croatia	Czech Republic
Mercury 7439-97-6	-	Check 25 µg/g Creatinine (urine - after end of work day, at the end of a work week/end of the shift)	100 µg/L - urine (Mercury) - not fixed	10 µg/L - blood (Mercury) - not critical 30 µg/g Creatinine - urine (Mercury) - single sample or urine collected over 24 hours	0.056 µmol/mmol Creatinine (urine - Mercury discretionary) 0.1 mg/g Creatinine (urine - Mercury discretionary)
Arsenic 7440-38-2	-	Check 3.2 million/µL Erythrocytes (red and white blood count - not provided) 3.8 million/µL Erythrocytes (red and white blood count - not provided) 4000 Leukocytes/µL (red and white blood count - not provided) 13000 Leukocytes/µL (red and white blood count - not provided) 10 g/dL Hemoglobin (red and white blood count - not provided) 12 g/dL Hemoglobin (red and white blood	-	70 µg/L - urine (Arsenic) - at the end of the work shift or urine collected over 24 hours	0.05 mg/g Creatinine (urine - Arsenic end of workweek) 0.075 µmol/mmol Creatinine (urine - Arsenic end of workweek)



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		<p>count - not provided)</p> <p>30 % Hematocrit (red and white blood count - not provided)</p> <p>35 % Hematocrit (red and white blood count - not provided)</p> <p>50 µg/L (urine - after end of work day, at the end of a work week/end of the shift)</p>			
<p>Lead 7439-92-1</p>	<p>70 µg/100 mL - blood (Lead) - no restriction</p> <p>0.075 mg/m<sup>3</sup> - air (Lead) - 40 hours per week</p> <p>40 µg/100 mL - blood (Lead) - no restriction</p>	<p>Check</p> <p>120 µg/100 mL RBC Erythrocyte protoporphyrin (blood - Ethylenediaminetetracetic acid not provided)</p> <p>30 µg/100 mL blood Lead (blood - Ethylenediaminetetracetic acid not provided)</p> <p>3.8 million/µL Erythrocytes (blood - Ethylenediaminetetracetic acid not provided)</p> <p>12 g/dL Hemoglobin (blood - Ethylenediaminetetracetic acid not provided)</p> <p>35 % Hematocrit (blood - Ethylenediaminetetracetic acid not provided)</p> <p>10 mg/L (urine - .delta.-Aminolevulinic acid not provided)</p>	<p>300 µg/L - blood (Lead) - not fixed</p> <p>400 µg/L - blood (Lead) - not fixed</p>	<p>400 µg Pb/L - blood (Lead) - not critical</p> <p>300 µg Pb/L - blood (Lead) - not critical</p> <p>15 U/LE - blood (.delta.-Aminolevulinic acid dehydratase) - not critical</p> <p>1.50 mg/LE - blood (Protoporphyrin in erythrocytes) - after exposure during 2-3 months (sample protected from light)</p>	<p>13 µmol/mmol Creatinine (urine - 5-Aminolevulinic acid discretionary)</p> <p>0.035 µmol/mmol Creatinine (urine - Coproporphyrin discretionary)</p> <p>15 mg/g Creatinine (urine - 5-Aminolevulinic acid discretionary)</p> <p>0.2 mg/g Creatinine (urine - Coproporphyrin discretionary)</p> <p>0.4 mg/L (blood - Lead discretionary)</p>



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		3.2 million/ $\mu$ L Erythrocytes (blood - Ethylenediaminetetraacetic acid not provided) 10 g/dL Hemoglobin (blood - Ethylenediaminetetraacetic acid not provided) 30 % Hematocrit (blood - Ethylenediaminetetraacetic acid not provided) 6 mg/L (urine - .delta.-Aminolevulinic acid not provided)			
Cadmium 7440-43-9	-	Check 2.5 $\mu$ g/g Creatinine (urine - N-Acetylglucosaminidase not provided) (- )	-	5 $\mu$ g/L - blood (Cadmium) - not critical 5 $\mu$ g/g Creatinine - urine (Cadmium) - single sample or urine collected over 24 hours	0.005 $\mu$ mol/mmol Creatinine (urine - Cadmium discretionary) 0.005 mg/g Creatinine (urine - Cadmium discretionary) 0.045 $\mu$ mol/L (blood - Cadmium discretionary) 0.005 mg/L (blood - Cadmium discretionary)
<b>Chemical name</b>	<b>Denmark</b>	<b>Finland</b>	<b>France</b>	<b>Germany DFG</b>	<b>Germany TRGS</b>
Mercury 7439-97-6	-	140 nmol/L (urine - Mercury in the morning after a working day at the end of a working week or exposure period) 50 nmol/L (blood - Mercury, inorganic at the end of a working week; time of day does not matter)	- blood (Total inorganic Mercury) - end of shift at end of workweek - urine (Total inorganic Mercury) - prior to shift	25 $\mu$ g/g Creatinine (urine - Mercury no restriction) 25 $\mu$ g/g Creatinine - BAT (no restriction in steady state) urine	25 $\mu$ g/g Creatinine (urine - Mercury no restriction)
Arsenic	-	70 nmol/L (urine -	- urine (Metabolites	10 $\mu$ g/L - BLW (end	-



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7440-38-2		Arsenic, inorganic after the work phase or shift after a working week or exposure period)	of inorganic Arsenic) - end of workweek	of exposure or end of shift) urine 0.5 µg/L - BAR (end of exposure or end of shift) urine 2 µg/L - BAR (end of exposure or end of shift) urine 10 µg/L - BAR (end of exposure or end of shift) urine 2 µg/L - (end of exposure or end of shift) - urine 2.5 µg/L - (end of exposure or end of shift) - urine 3 µg/L - (end of exposure or end of shift) - urine 8 µg/L - (end of exposure or end of shift) - urine 11 µg/L - (end of exposure or end of shift) - urine 13 µg/L - (end of exposure or end of shift) - urine 36 µg/L - (end of exposure or end of shift) - urine 57 µg/L - (end of exposure or end of shift) - urine	
Lead 7439-92-1	20 µg/100 mL (blood - Lead )	1.4 µmol/L (blood - Lead time of day does not matter) 50 µg/dL (blood - Lead ) 40 µg/dL (blood - Lead )	400 µg/L - blood (Lead) - 180 µg/L - blood (Lead) - indifferent sampling time 300 µg/L - blood (Lead) - 200 µg/L - blood (Lead) - 100 µg/L - blood (Lead) -	150 µg/L (whole blood - Lead no restriction) 150 µg/L - BAT (no restriction in steady state) blood 30 µg/L - BAR (no restriction in steady state) blood 40 µg/L - BAR (no restriction in steady	150 µg/L (whole blood - Lead no restriction)

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Cadmium 7440-43-9	-	20 nmol/L (urine - Cadmium at the end of a working week; time of day does not matter)	0.005 mg/g creatinine - urine (Cadmium) - not critical 0.004 mg/L - blood (Cadmium) - not critical	state) blood 1 µg/L - BAR (no restriction in steady state) blood 0.8 µg/L - BAR (no restriction in steady state) urine	-
<b>Chemical name</b>	<b>Hungary</b>	<b>Ireland</b>	<b>Italy MDLPS</b>	<b>Italy AIDII</b>	
Mercury 7439-97-6	0.030 mg/g Creatinine (urine - Mercury not critical) 0.017 µmol/mmol Creatinine (urine - Mercury not critical)	10 µg/L (blood - Mercury ) 30 µg/g Creatinine (urine - Mercury )	-	20 µg/g Creatinine - urine (Total inorganic mercury) - prior to shift	
Arsenic 7440-38-2	0.05 mg/L (urine - Arsenic end of shift) 0.67 µmol/L (urine - Arsenic end of shift)	35 µg/L (urine - inorganic Arsenic plus methylated metabolites end of workweek)	-	35 µg As/L - urine (Inorganic arsenic plus methylated metabolites) - end of workweek	
Lead 7439-92-1	-	70 µg/100 mL (blood - Lead not critical) 40 µg/100 mL (blood - Lead not critical) 30 µg/100 mL (blood - Lead not critical)	60 Pb µg/100 mL (blood - end of workweek)	30 µg/100 mL - blood (Lead) - not critical	
Cadmium 7440-43-9	0.02 mg/g Creatinine (urine - Cadmium not critical) 0.02 µmol/mmol Creatinine (urine - Cadmium not critical)	2 µg/g Creatinine (urine - not critical)	-	5 µg/g Creatinine - urine (Cadmium) - not critical 5 µg/L - blood (Cadmium) - not critical	
<b>Chemical name</b>	<b>Latvia</b>	<b>Luxembourg</b>	<b>Romania</b>	<b>Slovakia</b>	
Mercury 7439-97-6	10 µg/L - blood (Mercury) - 30 µg/g Creatinine - urine (Mercury) -	-	10 µg/L - blood (Mercury) - end of shift 30 µg/g Creatinine - urine (Mercury) - beginning of next shift	37.5 µg/L (urine - Mercury not critical) 15 mg/L (blood - Mercury after all work shifts)	
Arsenic 7440-38-2	-	-	50 µg/g Creatinine - urine (Arsenic) - end of work week 0.5 mg/100 g - hair (Arsenic) - end of work week	-	
Lead 7439-92-1	30 µg/100 mL - blood (Lead) - 100 µg/g Creatinine -	70 µg/100 mL - blood (Lead) - 0.072 mg/m <sup>3</sup> - blood	150 µg/L - urine (Lead) - end of shift 70 µg/100 mL - blood	400 µg/L (blood - Lead not critical) 100 µg/L (blood - Lead	

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	urine (Coproporphyrin) - 5 mg/g Creatinine - urine (Aminolevulinic acid) -	(Lead) - 40 µg/100 mL - blood (Lead) -	(Lead) - end of shift 3 mg/cm - hair (Lead) - end of shift 10 mg/L - urine (.delta.-Aminolevulinic acid) - end of shift 300 µg/L - urine (Coproporphyrin) - end of shift 100 µg/100 mL Erythrocyte - blood (free Erythrocytes protoporphyrin) - end of shift	not critical) 15 mg/L (urine - .delta.-Aminolevulinic acid not critical) 6 mg/L (urine - .delta.-Aminolevulinic acid not critical) 0.30 mg/L (urine - Coproporphyrins not critical)
Cadmium 7440-43-9	2 µg/L - urine (Cadmium) -	-	2 µg/g Creatinine - urine (Cadmium) - end of shift 5 µg/L - blood (Cadmium) - end of shift 2 mg/L - urine (Protein) - end of shift	3.1 µg/L (urine - Cadmium not critical)
<b>Chemical name</b>	<b>Slovenia</b>	<b>Spain</b>	<b>Switzerland</b>	<b>United Kingdom</b>
Mercury 7439-97-6	0.25 µg/g Creatinine - urine (Mercury) - not relevant 30 µg/L urine - urine (Mercury) - not relevant	30 µg/g Creatinine (urine - total Inorganic mercury pre-shift) 10 µg/L (blood - total Inorganic mercury end of workweek)	25 µg/g creatinine (urine - Mercury inorganic before subsequent shift) 14.3 nmol/mmol creatinine (urine - Mercury inorganic before subsequent shift) 15 µg/L (whole blood - Mercury inorganic end of shift, and after several shifts (for long-term exposures)) 75 nmol/L (whole blood - Mercury inorganic end of shift, and after several shifts (for long-term exposures))	20 µmol/mol creatinine - urine (Mercury) - random
Arsenic 7440-38-2	-	35 µg As/L (urine - Inorganic arsenic plus Methylated metabolites end of workweek)	50 µg/L (urine - inorganic Arsenic and Methylated metabolite end of shift, and after several shifts (for long-term exposures)) 667 nmol/L (urine - inorganic Arsenic and Methylated metabolite	-

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			end of shift, and after several shifts (for long-term exposures))	
Lead 7439-92-1	400 µg/L - blood (Lead) - not relevant 300 µg/L - blood (Lead) - not relevant	70 µg/dL (blood - Lead not critical)	400 µg/L (whole blood - Lead no restrictions) 1.93 µmol/L (whole blood - Lead no restrictions) 100 µg/L (whole blood - Lead no restrictions) 0.48 µmol/L (whole blood - Lead no restrictions)	-
Cadmium 7440-43-9	-	2 µg/g Creatinine (urine - Cadmium not critical) 5 µg/L (blood - Cadmium not critical)	2 µg/g creatinine (urine - Cadmium no restrictions) 2.01 nmol/mmol creatinine (urine - Cadmium no restrictions)	-

**Derived No Effect Level (DNEL)** No information available.

**Predicted No Effect Concentration (PNEC)** No information available.

### 8.2. Exposure controls

#### Personal protective equipment

##### Eye/face protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles). If splashes are likely to occur, wear safety glasses with side-shields.

##### Hand protection

Wear protective Neoprene™ gloves. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374. Wear suitable gloves. Impervious gloves.

##### Skin and body protection

Wear suitable protective clothing. Long sleeved clothing.

##### Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

##### General hygiene considerations

Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Wear suitable gloves and eye/face protection. Regular cleaning of equipment, work area and clothing is recommended.

##### Environmental exposure controls

Do not allow into any sewer, on the ground or into any body of water.



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## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Liquid
Colour	colourless
Odour	Odourless.
Odour threshold	No information available

Property	Values	Remarks • Method
Melting point / freezing point	0 °C	None known
Initial boiling point and boiling range	100 °C	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	100 °C	None known
pH	No data available	None known
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	23 hPa	@ 20°C
Relative density	0.99821 g/cm <sup>3</sup> at 20 °C	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

### 9.2. Other information

9.2.1. Information with regards to physical hazard classes  
Not applicable 100 °C 100 °C

9.2.2. Other safety characteristics  
No information available

## SECTION 10: Stability and reactivity



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### 10.1. Reactivity

**Reactivity** No information available.

### 10.2. Chemical stability

**Stability** Stable under normal conditions.

#### **Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** None under normal processing.

### 10.4. Conditions to avoid

**Conditions to avoid** Exposure to air or moisture over prolonged periods.

### 10.5. Incompatible materials

**Incompatible materials** Oxidising agent. Strong acids. Strong bases.

**Hazardous decomposition products** None known based on information supplied.

## **SECTION 11: Toxicological information**

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Information on likely routes of exposure

##### **Product Information**

**Inhalation** Specific test data for the substance or mixture is not available.

**Eye contact** Specific test data for the substance or mixture is not available. Causes serious eye irritation. (based on components). May cause redness, itching, and pain.

**Skin contact** Specific test data for the substance or mixture is not available. Causes skin irritation. (based on components).

**Ingestion** Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.



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### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. May cause redness and tearing of the eyes.

### Numerical measures of toxicity

#### Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	99,999.00 mg/kg
ATEmix (dermal)	99,999.00 mg/kg
ATEmix (inhalation-gas)	99,999.00 ppm
ATEmix (inhalation-dust/mist)	99,999.00 mg/l
ATEmix (inhalation-vapour)	139.50 mg/l

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Nitric Acid			= 2500 ppm ( Rat ) 1 h ATE (vapours) = 2.65 mg/L
Mercury			< 27 mg/m <sup>3</sup> ( Rat ) 2 h
Arsenic	= 15 mg/kg ( Rat )		
Cadmium	= 1140 mg/kg ( Rat )		= 25 mg/m <sup>3</sup> ( Rat ) 30 min

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Skin corrosion/irritation** Classification based on data available for ingredients. Causes skin irritation.

**Serious eye damage/eye irritation** Classification based on data available for ingredients. Causes serious eye irritation.

**Respiratory or skin sensitisation** No information available.

**Germ cell mutagenicity** No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as mutagenic.

Chemical name	European Union
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Cadmium	Muta. 2
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**Carcinogenicity**

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	European Union
Cadmium	Carc. 1B

**Reproductive toxicity** No information available.

The table below indicates ingredients above the cut-off threshold considered as relevant which are listed as reproductive toxins.

Chemical name	European Union
Mercury	Repr. 1B
Lead	Repr. 1A Lact.
Cadmium	Repr. 2

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Aspiration hazard** No information available.

### 11.2. Information on other hazards

#### 11.2.1. Endocrine disrupting properties

**Endocrine disrupting properties** No information available.

#### 11.2.2. Other information

**Other adverse effects** No information available.

## SECTION 12: Ecological information

### 12.1. Toxicity

**Ecotoxicity** Harmful to aquatic life with long lasting effects.

**Unknown aquatic toxicity** Contains 0 % of components with unknown hazards to the aquatic environment.

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Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Mercury	-	LC50: =0.5mg/L (96h, Cyprinus carpio) LC50: =0.16mg/L (96h, Cyprinus carpio) LC50: =0.18mg/L (96h, Cyprinus carpio) LC50: =0.9mg/L (96h, Oryzias latipes)	-	-
Lead	-	LC50: =0.44mg/L (96h, Cyprinus carpio) LC50: =1.17mg/L (96h, Oncorhynchus mykiss) LC50: =1.32mg/L (96h, Oncorhynchus mykiss)	-	EC50: =600µg/L (48h, water flea)
Cadmium	-	LC50: =0.003mg/L (96h, Oncorhynchus mykiss) LC50: =0.006mg/L (96h, Oncorhynchus mykiss) LC50: =0.002mg/L (96h, Cyprinus carpio) LC50: =4.26mg/L (96h, Cyprinus carpio) LC50: =0.24mg/L (96h, Cyprinus carpio) LC50: =21.1mg/L (96h, Lepomis macrochirus) LC50: =0.016mg/L (96h, Oryzias latipes) LC50: 0.0004 - 0.003mg/L (96h, Pimephales promelas)	-	EC50: =0.0244mg/L (48h, Daphnia magna)

#### 12.2. Persistence and degradability

**Persistence and degradability** No information available.

#### 12.3. Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

#### **Component Information**

Chemical name	Partition coefficient
Nitric Acid	-2.3



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### 12.4. Mobility in soil

Mobility in soil No information available.

### 12.5. Results of PBT and vPvB assessment

#### PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Nitric Acid	The substance is not PBT / vPvB
Arsenic	PBT assessment does not apply
Lead	PBT assessment does not apply
Cadmium	PBT assessment does not apply

### 12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

### 12.7. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste from residues/unused products Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Do not reuse empty containers.

## SECTION 14: Transport information

### IATA

14.1 UN number or ID number	UN3264
14.2 UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	A3, A803
ERG Code	8L



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### IMDG

14.1 UN number or ID number	UN3264
14.2 UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III
14.5 Marine pollutant	NP
14.6 Special precautions for user	
Special Provisions	223, 274
EmS-No.	F-A, S-B No information available
14.7 Maritime transport in bulk according to IMO instruments	No information available

### RID

14.1 UN number or ID number	UN3264
14.2 UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	274
Classification code	C1

### ADR

14.1 UN number or ID number	UN3264
14.2 UN proper shipping name	Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid)
14.3 Transport hazard class(es)	8
14.4 Packing group	III
Description	UN3264, Corrosive liquid, acidic, inorganic, n.o.s. (Nitric Acid), 8, III, (E)
14.5 Environmental hazards	Not applicable
14.6 Special precautions for user	
Special Provisions	274
Classification code	C1
Tunnel restriction code	(E)

## SECTION 15: Regulatory information

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

#### National regulations

France  
Occupational Illnesses (R-463-3, France)

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Chemical name	French RG number	Title
Mercury 7439-97-6	RG 2	-
Arsenic 7440-38-2	RG 20, RG 20bis	-
Lead 7439-92-1	RG 1	-
Cadmium 7440-43-9	RG 61, RG 61bis	-

### Germany

Water hazard class (WGK) slightly hazardous to water (WGK 1)

### Netherlands

Chemical name	Netherlands - List of Carcinogens	Netherlands - List of Carcinogens	Netherlands - List of Reproductive Toxins
Mercury	-	-	Development Category 1B
Arsenic	Present	-	Can be harmful via breastfeeding Development Category 1B Fertility Category 1B
Lead	-	-	Fertility Category 1A Development Category 1A Can be harmful via breastfeeding
Cadmium	Present	-	Fertility Category 1B; including stabilized, pyrophoric Development Category 1B; including stabilized, pyrophoric Can be harmful via breastfeeding including stabilized, pyrophoric

### Poland

SDS created according to the following Polish regulation: Act of February 25, 2011 on chemical substances and their mixtures (Journal of Laws of 2018, item 143, as amended). Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing the European Chemicals Agency (ECHA) as amended. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labeling and packaging of substances and mixtures, as amended. Regulation of the Minister of Health of 10 August 2012 on the criteria and

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method of classifying chemical substances and their mixtures (Journal of Laws of 2012, item 1018). Regulation of the Minister of Health of 20 April 2012 on labeling packaging of hazardous substances and mixtures and some mixtures (Journal of Laws of 2012, item 445). Regulation of the Minister of Family, Labor and Social Policy of 12 June 2018 on the maximum allowable concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2018, item 1286). Announcement of the Minister of Economy, Labor and Social Policy of August 28, 2003 on the publication of the unified text of the Ordinance of the Minister of Labor and Social Policy on general health and safety at work regulations (Journal of Laws of 2003, No. 169, item 1650) . Regulation of the Minister of Health of 30 December 2004 on occupational safety and health related to the presence of chemical agents in the workplace (Journal of Laws of 2005, No. 11, item 86). Act of December 14, 2012 on waste (Journal of Laws of 2013, item 21) Regulation of the Minister of Health of December 30, 2004 on occupational health and safety related to the presence of chemical agents in the workplace (Journal U. of 2005, No. 11, item 86). Waste Act of December 14, 2012 (Journal of Laws of 2013, item 21). Act of 13 June 2013 on the management of packaging and packaging waste, Journal of Laws 2013, item 888). Government statement of September 24, 2002 - European Agreement on the International Carriage of Dangerous Goods by Road (ADR) (Journal of Laws No. 194, item 1629 and Journal of Laws of 2003, No. 207, item 2013 and 2014).

### European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

### Authorisations and/or restrictions on use:

This product contains one or more substance(s) subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

### DIRECTIVE (EU) 2021/1187 on the marketing and use of explosives precursors

Not applicable

Chemical name	RESTRICTED EXPLOSIVES PRECURSORS - ANNEX I	REPORTABLE EXPLOSIVES PRECURSORS - ANNEX II
Nitric Acid - 7697-37-2	3 %w/w	-

Chemical name	Restricted substance per REACH Annex XVII	Substance subject to authorisation per REACH Annex XIV
Nitric Acid - 7697-37-2	75.	
Mercury - 7439-97-6	18[a]. 30. 75.	
Arsenic - 7440-38-2	75.	
Lead - 7439-92-1	72. 30. 63. 75.	
Cadmium - 7440-43-9	72.	



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	23.	
	28.	
	75.	

### Persistent Organic Pollutants

Not applicable

### Export Notification requirements

This product contains substances which are regulated pursuant to Regulation (EC) No. 649/2012 of the European parliament and of the council concerning the export and import of dangerous chemicals

Chemical name	European Export/Import Restrictions per (EC) 649/2012 - Annex Number
Mercury - 7439-97-6	I.1 I.2 V
Lead - 7439-92-1	I.1
Cadmium - 7440-43-9	I.1 I.2

### Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

### EU - Water Framework Directive (2000/60/EC)

Chemical name	EU - Water Framework Directive (2000/60/EC)
Mercury - 7439-97-6	Priority hazardous substance
Lead - 7439-92-1	Priority substance
Cadmium - 7440-43-9	Priority hazardous substance

### EU - Environmental Quality Standards (2008/105/EC)

Chemical name	EU - Environmental Quality Standards (2008/105/EC)
Mercury - 7439-97-6	Priority hazardous substance
Lead - 7439-92-1	Priority substance
Cadmium - 7440-43-9	Priority hazardous substance

### International Inventories

#### TSCA

LGC, to the best of its ability, has confirmed that the chemical substances in this product are listed as "Active" in the EPA (Environmental Protection Agency) "TSCA Inventory Notification (Active-Inactive) Requirements Rule" ("the Final Rule") of Feb 2019, as amended Feb 2021."

#### DSL/NDSL

Contact supplier for inventory compliance status

#### EINECS/ELINCS

Contact supplier for inventory compliance status

#### ENCS

Contact supplier for inventory compliance status



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<b>IECSC</b>	Contact supplier for inventory compliance status
<b>KECI</b>	Contact supplier for inventory compliance status
<b>PICCS</b>	Contact supplier for inventory compliance status
<b>AIIC</b>	Contact supplier for inventory compliance status

### Legend:

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances  
**ENCS** - Japan Existing and New Chemical Substances  
**IECSC** - China Inventory of Existing Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**AICS** - Australian Inventory of Chemical Substances

### 15.2. Chemical safety assessment

**Chemical Safety Report** A Chemical Safety Assessment is not required for this substance

## SECTION 16: Other information

### Key or legend to abbreviations and acronyms used in the safety data sheet

#### **Full text of H-Statements referred to under section 3**

EUH071 - Corrosive to the respiratory tract  
H272 - May intensify fire; oxidiser  
H290 - May be corrosive to metals  
H301 - Toxic if swallowed  
H314 - Causes severe skin burns and eye damage  
H330 - Fatal if inhaled  
H331 - Toxic if inhaled  
H341 - Suspected of causing genetic defects  
H350 - May cause cancer  
H351 - Suspected of causing cancer  
H360 - May damage fertility or the unborn child  
H360D - May damage the unborn child  
H360FD - May damage fertility. May damage the unborn child  
H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child  
H362 - May cause harm to breast-fed children  
H372 - Causes damage to organs through prolonged or repeated exposure  
H400 - Very toxic to aquatic life  
H410 - Very toxic to aquatic life with long lasting effects

### **Legend**

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SVHC: Substances of Very High Concern for Authorisation:

### Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)  
Ceiling Maximum limit value Sk\* Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
Mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method
Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method
Corrosive to metals	On basis of test data

### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
EPA (Environmental Protection Agency)  
Acute Exposure Guideline Level(s) (AEGl(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
Japan GHS Classification  
Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
National Toxicology Program (NTP)



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New Zealand's Chemical Classification and Information Database (CCID)  
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme  
Organisation for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

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**This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006**

### Disclaimer

**The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.**

**End of Safety Data Sheet**