

Date of Issue: 2009-04-21  
Revision Date: 2010-03-26

### 1. Identification of Substance/Preparation and Company/Undertaking:

Name of Product: *PlasmaCAL* calibration standard for ICP-AES & ICP-MS containing 1000 µg/ml Cd. (Cadmium in 4% nitric acid). Traceable to NIST.

Catalogue No: 140-051-480/481/482/485

Name of Manufacturer: SCP SCIENCE  
21 800 Clark-Graham  
Baie d'Urfé, Québec  
Canada H9X 4B6  
Tel: (514) 457-0701  
Fax: (514) 457-4499

Name of Supplier in Europe:  
SCP SCIENCE, 12 Avenue du Québec  
Bâtiment I-2 SILIC 642  
91965 Courtaboeuf (Les Ulis)  
CEDEX, France  
Téléphone: 33-01-69-18-71-17  
Télécopieur: 33-01-60-92-05-67

In the United States:  
SCP SCIENCE  
348 Route 11  
Champlain, NY  
12919-4816  
Tel: (800) 361-6820  
Fax: (800) 253-5549

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### 2. Composition and Information on Ingredients:

Nitric acid: (4%)

CAS No.: 7697-37-2

EU-Index No.: 007-004-00-1

Fatal dose for humans: 5-10 ml conc. HNO<sub>3</sub>

LC<sub>50</sub> (rat-inh): 224 ppm NO<sub>2</sub>/30 min.

EU Symbol: C O

R Phrases: 8, 35 Contact with combustible material may cause fire. Causes severe burns.

Cadmium: (0,1%)

CAS No.: 7440-43-9

EU-Index No.: ---

LD<sub>50</sub>: unknown

LC<sub>50</sub>: unknown

EU Symbol: Xn

R Phrases: 20/22, 40 Harmful by inhalation and if swallowed. Possible risk of cancer.

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### 3. Hazards Identification:

Potential Health Effects:

May cause cancer.

Causes eye and skin irritation or burns in contact.

Ingestion: A component of this preparation, cadmium, may cause cancer by inhalation or ingestion.

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**4. First Aid Measures:**

Inhalation: Remove the victim from exposure.

Contact with skin: Rinse with plenty of water.

Contact with eyes: Rinse with plenty of water for at least 15 minutes, including under the upper and lower eyelids.

Ingestion: Do not induce vomiting; seek medical advice immediately and show the container or label. If victim is conscious and alert, give 2-4 cupfuls of milk or water.

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**5. Fire-fighting Measures:**

Extinguishing Media:

Appropriate: Usual media appropriate to surrounding fire conditions.

Avoid: ---

Special protective equipment for firefighters: Wear suitable protective clothing, gloves, and eye/face protection.

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**6. Accidental Release Measures:**

Personal protection: Wear suitable protective clothing, gloves, and eye/face protection.

Environmental precautions: ---

Methods for cleaning up: Dilute with water, spread sodium bicarbonate on the spill. Collect spilled material in suitable container for proper disposal.

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**7. Handling and Storage:**

Have immediate availability of an eyewash in case of emergency. Do not store in metal container.

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**8. Exposure Controls and Personal Protection:**

Preventive measures:

Respirators: In case of insufficient ventilation, wear suitable respiratory equipment. Use laboratory fume hood.

Hand/Skin: Wear suitable clothing and gloves.

Eye: Eye-wash station in proximity. Avoid contact with skin and eyes.

Personal hygiene: Wash hands after use.

Other information:

Exposure controls:

Nitric Acid: TLV 2 ppm; 5,2 mg/m<sup>3</sup> (as STEL: 4 ppm, 10 mg/m<sup>3</sup>) (ACGIH 1993-1994)

Cadmium: TLV (as dust): ppm; 0.05 mg/m<sup>3</sup> as TWA (ACGIH 1991-1992).

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**9. Physical and Chemical Properties:**

State: aqueous liquid

Colour: colourless

Odour: odourless

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Important health, safety and environmental information:

pH: <1  
Boiling Point: c 105 C  
Flash Point: NA  
Flammability (solid/gas): non-inflammable  
Explosive properties: NA  
Vapour pressure: NA  
Relative density: NA  
Solubility in water: miscible (in all proportions)  
Solubility in solvent oil:  
Partition coefficient: n-octanol/water: NA  
Viscosity: NA  
Vapour density: NA  
Evaporation rate: NA

Other information: ---

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**10. Stability and Reactivity:**

Stability: stable at room temperature and conditions of use.  
Conditions to avoid: excessive heat.  
Materials to avoid: reacts with bases.  
Hazardous decomposition products: possibility of nitrogen oxides.  
Other data: The preparation attacks many metals

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**11. Toxicological Information:**

Acute toxicity of preparation: No information about preparation available.  
Local effects: The preparation is corrosive.  
Long-term toxicity: no information available.

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**12. Ecological Information:**

Ecotoxicity: no information about this preparation is available.  
Mobility: no information about this preparation is available.  
Persistence and degradability: no information about this preparation is available.  
Bioaccumulative potential: no information about this preparation is available.

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**13. Disposal Considerations:**

Consult local hazardous or chemical waste disposal agency for regulations.

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**14. Transport Information:**

IDMG (sea):  
UN Number: UN3264  
Class: 8  
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (nitric acid 4%)  
Packing group: III  
Other applicable information:  
ADR/DOT (road):  
UN Number: UN1760  
Class: 8  
Proper shipping name: Corrosive liquid, n.o.s. (nitric acid 4%)

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Packing group: III  
Other applicable information:  
ICAO/IATA (air):  
UN Number: UN3264  
Class: 8  
Proper shipping name: Corrosive liquid, acidic, inorganic, n.o.s. (nitric acid 4%)  
Packing group: III  
Other applicable information:

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#### **15. Regulatory Information:**

A component of this preparation is listed in the National Toxicology Program ARC (9<sup>th</sup> Report on carcinogens) as a known human carcinogen: cadmium

A component of this preparation appears in the list (June 28, 2002) of chemicals known to the state to cause cancer (California Proposition 65): cadmium

EU labelling in accordance with EC Directives:

Symbol: Xn Harmful

R-Phrases: 36/38, 40 Irritating to eyes and skin. May cause cancer.

S-Phrases: 53, 26, 36/37/39, 45 Avoid exposure – obtain special instructions before use. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing, gloves and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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#### **16. Other Information:**

The information contained herein is believed to be accurate and is supplied in good faith. Individuals receiving this data must exercise their own judgement in determining its suitability for a particular purpose.