

SDS 114206 Date of Issue/re-issue: 29.08.2017

User declaration:- I have read and understood this Safety Data Sheet

Name:- \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Name:- \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

### 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Company Name

# ECP Limited

Address: 39 Woodside Ave, Northcote, Auckland , New Zealand

Emergency Tel: NZ 0800243622	Tel +64 9 480 4386	FAX +64 9 480 4385
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<b>Product</b>	<b>Barium Rods</b>			<b>Code</b>	<b>114206</b>
<b>CAS#</b>	<b>HSNO#</b>	<b>UN #</b>	<b>DG Class/es</b>	<b>Packing group #</b>	
7440-39-3	HSR002692	1400	4.3	II	

**Recommended use:** Laboratory Investigations

#### 2. Hazards Identification

### 2. HAZARDS IDENTIFICATION

#### 2.1 GHS Classification

Substances and mixtures, which in contact with water, emit flammable gases (Category B)

#### 2.2 GHS Label elements, including precautionary statements



Pictogram

Signal word Danger

Hazard statement(s)

H261 In contact with water releases flammable gases.

Precautionary statement(s)

Prevention

P223 Keep away from any possible contact with water, because of violent reaction and possible flash fire.

P231 + P232 Handle under inert gas. Protect from moisture.

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

Response

P335 + P334 Brush off loose particles from skin. Immerse in cool water/ wrap in wet bandages.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage

P402 + P404 Store in a dry place. Store in a closed container.

Disposal

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

**2.3 Other hazards** - none

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : Ba

Molecular weight : 137.33 g/mol

Component Concentration

**Barium**

CAS-No.7440-39-3 <= 100 %

**4. FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Flush eyes with water as a precaution.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

Stomach/intestinal disorders, Nausea, Vomiting, Drowsiness, Dizziness, Gastrointestinal disturbance, Weakness, Tremors, Seizures.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

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

No data available

**5. FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Dry powder

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

No data available

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available

**6. ACCIDENTAL RELEASE MEASURES**

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

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

**6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Sweep up and shovel. Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Do not flush with water. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**7. HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition

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No smoking.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

Never allow product to get in contact with water during storage.

Store under inert gas.

**7.3 Specific end use(s)**

No data available

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

**Occupational Exposure Limits**

Component CAS-No. Barium 7440-39-3 WESTWA  
0.5 mg/m<sup>3</sup> New Zealand. Workplace Exposure  
Standards for Atmospheric Contaminants

## **8.2 Exposure controls**

### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### **Personal protective equipment**

#### **Eye/face protection**

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0.11 mm

#### **Body Protection**

Flame retardant protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

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

a) Appearance Form: Rods

Colour: grey

b) Odour No data available

c) Odour Threshold No data available

d) pH No data available

e) Melting point/freezing point

Melting point/range: 725 °C - lit.

f) Initial boiling point and boiling range 1,640 °C - lit.

g) Flash point Not applicable

h) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower flammability or explosive limits - No data available

k) Vapour pressure No data available

l) Vapour density No data available

m) Relative density 3.6 g/mL at 25 °C

n) Water solubility No data available

o) Partition coefficient: noctanol/water - No data available

p) Auto-ignition temperature

No data available

q) Decomposition temperature

No data available

r) Viscosity No data available

## **10. STABILITY AND REACTIVITY**

### **10.1 Reactivity**

No data available

### **10.2 Chemical stability**

No data available

### **10.3 Possibility of hazardous reactions**

Reacts violently with water.

### **10.4 Conditions to avoid**

Exposure to moisture

### **10.5 Incompatible materials**

Oxidizing agents, Water, acids, Oxygen, Chlorinated solvents, Carbon dioxide (CO<sub>2</sub>), Halogens, Halogenated hydrocarbon, Alcohols, Sulphur compounds, Hydrogen sulfide gas

### **10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions. - Barium oxide

Other decomposition products - No data available

## **11. TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

#### **Acute toxicity**

No data available

#### **Skin corrosion/irritation**

No data available

#### **Serious eye damage/eye irritation**

No data available

#### **Respiratory or skin sensitisation**

No data available

#### **Germ cell mutagenicity**

No data available

#### **Carcinogenicity**

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

#### **Reproductive toxicity**

No data available

#### **Specific target organ toxicity - single exposure**

No data available

#### **Specific target organ toxicity - repeated exposure**

No data available

#### **Aspiration hazard**

No data available

#### **Potential health effects**

**Inhalation** May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion** May be harmful if swallowed.

**Skin** May be harmful if absorbed through skin. May cause skin irritation.

**Eyes** May cause eye irritation.

#### **Signs and Symptoms of Exposure**

Stomach/intestinal disorders, Nausea, Vomiting, Drowsiness, Dizziness, Gastrointestinal disturbance, Weakness, Tremors, Seizures.

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

#### **Additional Information**

RTECS: CQ8370000

## **12. ECOLOGICAL INFORMATION**

### **12.1 Toxicity**

Toxicity to fish mortality NOEC - Cyprinodon variegatus (sheepshead minnow) - 500 mg/l - 96h

LC50 - Cyprinodon variegatus (sheepshead minnow) - > 500 mg/l - 96 h

### **12.2 Persistence and degradability**

No data available

### **12.3 Bioaccumulative potential**

No data available

### **12.4 Mobility in soil**

No data available

### **12.5 Results of PBT and vPvB assessment**

No data available

**12.6 Other adverse effects**

No data available

**13. DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**14.1 UN number**

ADR/RID: 1400 IMDG: 1400 IATA-DGR: 1400

**14.2 UN proper shipping name**

ADR/RID: BARIUM

IMDG: BARIUM

IATA-DGR: Barium

**14.3 Transport hazard class(es)**

ADR/RID: 4.3 IMDG: 4.3 IATA-DGR: 4.3

**14.4 Packaging group**

ADR/RID: II IMDG: II IATA-DGR: II

**14.5 Environmental hazards**

ADR/RID: no IMDG Marine pollutant: no IATA-DGR: no

**14.6 Special precautions for user**

No data available

**15. REGULATORY INFORMATION**

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

**National regulatory information**

HSNO Group Standard Approval: HSR002692

Tracking Required: not required

Approved Handler Cert.: 6.1C

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16. Disclaimer

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The information above is believed to be accurate and represents the best information currently available to us. However, the information is not a guarantee expressed or implied, with respect to such information, and we assume no liability resulting from its use. Anyone using the chemical described here should ensure that he or she has the appropriate training and has the expertise and any equipment required for safe handling. If clarification or further information is required, please contact ECP Ltd or refer to the official handler of dangerous goods within your own company. The user should also make their own investigations to determine the suitability of the product for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.

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