#### SDS 1440 Barium Hydroxide

Date of Issue: 20/05/2019

Expiry: 01/06/2024

#### **1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER**

**ECP Limited** 

Company Name Address:

39 Woodside Ave, Northcote, Auckland , New Zealand

				-	-		
Emergency Tel: 0800 243 622 or 			<b>Tel</b> +64 9 480 4386		<b>FAX</b> +64 9 480 4385		
Product	Barium Hydr	oxide			Code	1440	
CAS#	HSNO#	UN #	DG	Packing group	o # Tracking?	Handlers	
			Class/es			Certificate?	
17194-00-2	HSR007245	3262	8	II	No	No	

**Recommended use:** Laboratory Investigations

#### 2. Hazards identification

2.1 GHS Classification
Acute toxicity, Oral (Category D)
Acute toxicity, Inhalation (Category D)
Skin corrosion (Category B)
Serious eye damage (Category A)
2.2 GHS Label elements, including precautionary statements

Pictogram

# Signal word Danger

Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

Precautionary statement(s)

Prevention

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

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

Response

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician.

P363 Wash contaminated clothing before reuse.

Storage

P405 Store locked up.

Disposal

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

#### 3. Composition/information on ingredients

3.1 Substances Formula: H<sub>2</sub>BaO<sub>2</sub>

Molecular weight: 171.34 g/mol

Component	Concentration		
Barium Hydroxide			
CAS No.	17194-00-2	<=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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. 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

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. May cause cough, shortness of breath, headache, nausea.

## 5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

Barium oxide

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

## 7. Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

7.2 Conditions for safe storage, including any incompatibilities

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

### 8. Exposure controls/personal protection

8.1 Control parameters

**Occupational Exposure Limits Table** 

Component	CAS No	Value	Control	Basis	
			parameters		
Barium hydroxide	17194-	WES-	0.5 mg/m <sup>3</sup>	New Zealand. Workplace Exposure	
	00-2	TWA		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

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards.

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

Break through time: 480 min

**Body Protection** 

Complete suit protecting against chemicals. 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 or 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: powder
Colour: white
b) pH
12.5 at 50 g/l at 20 °C
c) Melting point/freezing point
Melting point/range: > 300 °C - lit

d) Relative density 2.2 g/mL at 25 °C

#### 10. Stability and reactivity

10.1 Incompatible materials Acids, strong oxidizing agents.

### **11.** Toxicological information

11.1 Information on toxicological effects Acute toxicity LD50 Oral - Rat - 308 mg/kg Skin corrosion/irritation Causes skin burns. Serious eye damage/eye irritation Risk of serious damage to eyes. Carcinogenicity 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. Aspiration hazard Corrosive to the respiratory tract. Potential health effects Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Ingestion Harmful if swallowed. Causes burns. Skin May be harmful if absorbed through skin. Causes skin burns. Eyes Causes eye burns. Signs and Symptoms of Exposure Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. May cause cough, shortness of breath, headache, nausea. Additional Information RTECS: CQ9200000

#### **12.** Ecological information

May be harmful to aquatic organisms due to the shift of the pH.

#### 13. Disposal considerations

13.1 Waste treatment methods Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

### 14. Transport Information Table

		ADR/RID –	IMDG	IATA – DGR
		European packaging	International	International Air Travel
		certification	Maritime Dangerous	Association – Dangerous
			Goods Code	Goods Regulations
14.1	UN Number	3262	3262	3262
14.2	UN Proper Shipping	CORROSIVE SOLID,	CORROSIVE SOLID,	Corrosive solid, basic,
	name	BASIC, INORGANIC,	BASIC, INORGANIC,	inorganic, n.o.s.
		N.O.S.	N.O.S.	
14.3	Transport Hazard	8	8	8
	Class			
14.4	Packaging group	=	П	11
14.5	Environmental	No	No	No
	Hazards			
14.6	Special precautions	None		
	for user			

#### 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture National regulatory information

HSNO Approval Code: HSR007245

HSNO Group Standard Approval: Outside of Group Standard

Tracking Required: not required

Approved Handler Cert.: not required

#### 16. Disclaimer

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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