


# SAFETY DATA SHEET

## BARIUM CHLORIDE SOLUTION

SECTION 1 IDENTIFICATION OF THE MATERIAL AND SUPPLIER	
<b>Product Name:</b>	Barium Chloride Solution
<b>Other Names:</b>	Aqueous solution: Alkalinity Reagent 1
<b>Recommended Use:</b>	Water testing.
<b>Part Nos.:</b>	SR004, SR005
<b>Supplier:</b>	Spirax Sarco Limited 6 Nandina Avenue, East Tamaki, Auckland, New Zealand. Ph: 09 263 3674 Email: <a href="mailto:wt@nz.spiraxsarco.com">wt@nz.spiraxsarco.com</a>
<b>Emergency numbers</b>	<ul style="list-style-type: none"> <li>- <b>New Zealand Ambulance/Police/Fire:</b> Dial 111</li> <li>- <b>New Zealand Poisons Information Centre:</b> Dial 0800 POISON (0800 764 766)</li> <li>- <b>Australian Police and Fire Brigade:</b> Dial 000</li> <li>- <b>Australian Poisons Information Centre:</b> Dial 13 11 26 (from anywhere in Australia)</li> <li>- <b>Spirax Sarco NZ 24 hours Emergency:</b> Dial 027 475 2626</li> </ul>

SECTION 2 HAZARDS IDENTIFICATION	
<b>Classification:</b>	Classified as hazardous according to criteria in the NZ EPA Hazardous Substances (Hazard Classification) Notice 2020 Signal Word: DANGER Hazardous Substance according to the criteria of NOHSC Australia. Xn Harmful
<b>Pictograms:</b>	
<b>Risk Phrase(s)</b>	R20 Harmful by inhalation.
<b>Safety Phrase(s)</b>	S1/2 Keep locked up and out of the reach of children. S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label whenever possible.)
<b>Hazard Classification:</b>	HSNO GHS Equivalent 6.1C Acute oral toxicity Category 3 9.3C Hazardous to terrestrial vertebrates

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS					
Chemical Identity	CAS Number	Proportion, %	LD50 Oral (Rat)	WES TWA, mg/m <sup>3</sup>	WES STEL, mg/m <sup>3</sup>
Barium Chloride	10361-37-2	1-10	118 mg/kg	Not available	Not available
Non hazardous Ingredients	Not applicable	to 100	>5000 mg/kg	Not available	Not available

SECTION 4 FIRST AID MEASURES	
<b>Inhalation:</b>	May be fatal. Remove to fresh air, administer artificial respiration if needed. Seek medical attention.
<b>Ingestion:</b>	May be fatal. Give 2 glasses of water and induce vomiting immediately. Seek medical attention immediately. Never give anything by mouth to an unconscious person.
<b>Skin:</b>	May be fatal. Flush the contacted area thoroughly with clean water. Remove contaminated clothing. Seek medical attention if irritation occurs.
<b>Eyes:</b>	Immediately flush eyes with clean water for 15 minutes. Seek medical attention.
<b>Medical Attention and Treatment:</b>	Treat symptomatically.

SECTION 5 FIRE FIGHTING MEASURES	
<b>Extinguishing Media:</b>	Water spray, fog or mist. Foam. Carbon Dioxide (CO <sub>2</sub> ). Dry Powder.
<b>Combustion Products - Hazards:</b>	None.
<b>Protective Measures In Fire:</b>	Wear full protective clothing and use self-contained breathing apparatus.
<b>HAZCHEM Code:</b>	<b>2X</b>

SECTION 6 ACCIDENTAL RELEASE MEASURES	
<b>Emergency Procedures:</b>	For a major spill, prevent spillage from entering drains or watercourses. Evacuate the spill area. Call the Fire Brigade.
<b>Spill Cleanup Methods:</b>	Wear appropriate personal protection equipment (Refer to Section 8). Stop leak if safe to do so, and contain spill. Absorb onto sand, vermiculite or other suitable absorbent material. Sweep up or shovel into labelled containers for disposal. After spills, wash the area preventing runoff from entering drains. If material enters drains, advise emergency services. Dispose of only in accordance with all regulations.


SECTION 7 HANDLING AND STORAGE	
<b>Usage Precautions:</b>	Handle with care. Avoid spilling. Avoid skin and eye contact. Provide adequate ventilation. Do not allow product to come into contact with acids. Do not allow contact with ammonium salts, aluminium, tin, zinc or magnesium.
<b>Storage Precautions:</b>	Store in cool dry place away from direct sunlight. Keep in original containers.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION	
<b>National Exposure Limits:</b>	No specific guidelines for this product. See Section 3 for exposure limits of each ingredient if product is a mixture.
<b>Biological Limits:</b>	No specific guidelines for this product. <i>Please note:</i> Calculating exposure limits on mixtures requires professional judgement to determine if the results are appropriate to the specific combination of ingredients. Occasionally certain chemical mixtures contain components that may act upon the same organ system. The combined health effects may be additive. See Section 3 for exposure limits of each ingredient if product is a mixture.
<b>Engineering Controls:</b>	For normal use, general room ventilation is adequate. In confined spaces or high use areas, maintain adequate ventilation by suitable extraction or wear a respirator.
<b>Personal Protective Equipment</b>	<ul style="list-style-type: none"> <li>- <b>Ventilation:</b> No special requirements under normal use. Handling should take place in a well ventilated area.</li> <li>- <b>Respirators:</b> No special requirements under normal use. If exposure to spray, mist or vapours is possible, wear a face mask respirator with appropriate cartridge.</li> <li>- <b>Protective Gloves:</b> Wear impermeable protective gloves when handling.</li> <li>- <b>Eye Protection:</b> Wear approved safety glasses, goggles or face shield.</li> <li>- <b>Other Protection:</b> Wear appropriate clothing to prevent any possibility of skin contact such as coveralls, rubber/PVC apron, PVC boots, full face shield.</li> <li>- <b>Hygienic Work Practices:</b> Product spillages are a slip hazard. Ensure any spillages are cleaned up immediately. (Refer Section 6)</li> </ul>

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES	
<b>Appearance:</b>	Clear, colourless liquid.
<b>Odour:</b>	None.
<b>pH:</b>	Not available.
<b>Vapour Pressure:</b>	2.3 kPa (25°C)
<b>Vapour Density (Air = 1):</b>	>1
<b>Boiling Point:</b>	100°C
<b>Freezing Point:</b>	<5°C
<b>Solubility in Water:</b>	Soluble
<b>Specific Gravity:</b>	Not available.

SECTION 10 STABILITY AND REACTIVITY	
<b>Chemical Stability:</b>	Stable under normal conditions.
<b>Conditions to Avoid:</b>	Avoid heat.
<b>Incompatible Materials:</b>	Alkalis, sulphate salts, phosphate salts.
<b>Hazardous Decomp. Products:</b>	None.
<b>Hazardous Reactions:</b>	None.

SECTION 11 TOXICOLOGICAL INFORMATION	
<b>Toxicological Data:</b>	LD50 Oral (Rat) – 1180 mg/kg No specific data is available for chronic exposure symptoms. The ingredients are not listed as carcinogenic in 'Workplace Exposure Standards (NZ)', nor in NOHSC's <i>List of Designated Hazardous Substances (Aus)</i> .
<b>Inhalation:</b>	May be fatal. Can cause irritation to mucous membranes.
<b>Ingestion:</b>	May be fatal. Can cause irritation of mucous membranes of the mouth, throat, and stomach.
<b>Skin:</b>	May be fatal. Can cause irritation.
<b>Eyes:</b>	Destructive to eye tissue on contact. Will cause severe burns. May cause blindness.

SECTION 12		ECOLOGICAL INFORMATION	
<b>Ecotoxicity:</b>	Information not available.		
<b>Persistence and Degradability:</b>	Information not available.		
<b>Mobility:</b>	Information not available.		
SECTION 13		DISPOSAL CONSIDERATIONS	
<b>Disposal Methods:</b>	Dispose of in accordance with all government regulations. Wash empty packaging well with water, rinsing several times.		
SECTION 14		TRANSPORT INFORMATION	
<b>Label for Conveyance:</b>			
<b>UN Number:</b>	3287		
<b>UN Proper Shipping Name:</b>	TOXIC LIQUID, INORGANIC, N.O.S. (Contains Barium Chloride)		
<b>Class Number:</b>	6.1		
<b>Class:</b>	Toxic Substances.		
<b>Subsidiary Risk:</b>	None Allocated.		
<b>pH Classification</b>	Neutral		
<b>Packing Group:</b>	III		
<b>Special Precautions for User:</b>	None		
<b>HAZCHEM Code:</b>	2X		
SECTION 15		REGULATORY INFORMATION	
<b>Licenses Required:</b>	Information not available.		
<b>HSNO Classification:</b>	6.1C, 9.3C		
<b>HSNO Group Standard:</b>	Laboratory Chemicals and Reagent Kits Group Standard 2020		
<b>HSNO Approval Number:</b>	HSR002596		
<b>HSNO Requires Tracking:</b>	No		
<b>HSNO Requires Chem Handler:</b>	Yes, if not locked up		
SECTION 16		OTHER INFORMATION	
<b>Definitions:</b>	LD50 Oral (Rat)	Lethal dose when taken orally causing death in 50% of the population.	
	WES TWA	Workplace Exposure Standard, Time Weighted Average.	
	WES STEL	Workplace Exposure Standard, Short Term Exposure Limit.	
	NOHSC	National Occupational Health and Safety Commission (Australia).	
	CAS Number	Chemical Abstracts Service – Unique chemical number.	
<b>References:</b>	Prepared in accordance with the Hazardous Substances (Safety Data Sheets) Notice 2017 EPA CONSOLIDATION 30 April 2021		
<b>Document Code:</b>	sds Barium Chloride Solution.docx		
<b>Issue Date:</b>	16 April 2021		
<b>Valid to:</b>	15 April 2026		
<b>Disclaimer:</b>	The information contained herein is based on the present state of our knowledge and is given in good faith. This information is intended to describe our product from the point of view of safety requirements; it should not therefore be construed as guaranteeing specific properties. No warranty, expressed or implied is made. Any use of this data and information must be determined by the user to be in accordance with applicable Governmental laws and regulations.		

END OF SDS