SAFETY DATA SHEET

5109 BARIUM CARBONATE

1. Identification of substance/preparation and of the company undertaking

Trade Name:	Barium carbonate
Chemical Name:	Barium carbonate
Synonyms:	None

2. Composition /information on ingredients

Component	CAS	EINECS	% of composition
Barium carbonate	513-77-9	2081673	>99

3. Hazards Identification

Inhalation	Excessive exposure may cause damage to lungs and kidneys.
Ingestion	Excessive exposure may cause severe abdominal pains, nausea, vomiting, tremors and diarrhoea.
Eyes	Excessive exposure may cause severe irritation due to alkalinity.
Skin	Excessive exposure may cause severe irritation due to alkalinity.

4. First Aid Measures

Inhalation	Remove patient to fresh air, loosen tight clothing and seek medical attention.
Ingestion	Do not induce vomiting, seek medical advice. Advice for medical personnel only – slowly give 10ml of 10% Na_2SO_4 orally repeated every 15 minutes to alleviate poisoning symptoms.
Eyes	Wash immediately with copious amounts of water.
Skin	Wash affected areas with water.

5. Fire Fighting Hazards

Extinguishing media	Suitable for surrounding fire conditions
Special exposure hazard	In the event of a fire the product may emit harmful or toxic fumes.
Personal protective equipment	Self contained breathing apparatus.

6. Accidental Release Measure

Leaks and Spills	Use suitable vacuum equipment where reasonably practicable, otherwise damp down and scoop into a receptacle. Do not wash into watercourses, sewers or drains.
Personal protective equipment	Respiratory protective equipment.

7. Handling & Storage

Handing	Do not eat, drink, or smoke in areas where the material is used. Wash thoroughly after handling the product.
Storage	Store in a dry area.

8. Exposure Control/Personal Protection

Engineering controls	Adequate ventilation should be provided so that Occupational Exposure Limits are not exceeded. Local Exhaust Ventilation is normally recommended.
Personal Protective equipment	Where LEV is not practicable and exposure is likely to be excessive, approved respiratory protection to CEN standards prEN 140, 141, 143 or 149 should be worn. Protective gloves and overalls are recommended for prolonged contact.

9. Physical & Chemical Properties

Appearance and Odour	White powder, odourless.
Flash point (°C)	Not applicable
Flammability	Not applicable
Explosive properties	Non-explosive
Oxidising properties	None
Specific gravity	4.4
pH value	>7 (alkaline but sparingly soluble in water)
Melting point (°C)	Decomposes at 1360°C

10. Stability & Reactivity

Chemical stability	The material is stable
Conditions/materials to avoid	Heat, sparks, flames, moisture, acids.
Hazardous decomposition products	None known
Hazardous polymerization products	None

11. Toxicological Information

Acute toxicology	LD50	Oral	630mg/kg
	LD50	Dermal	Not known
	LD50	Inhalation	Not known
Health Effects	Not known.		

12. Ecological Information

Ecotoxicity	The products bioconcentrates but does not bioaccumulate.
Persistence	Sparingly soluble in water, forms a cloudy suspension can generate a persistent 200ppm soluble barium.

13. Disposal Considerations

Dispose in accordance with current waste Disposal regulations (for UK – Control of Pollution {Special Waste} Regulations 1980). Landfill is the most appropriate method.

14. Transport Information

UN/SI No		1564
UN Class		6.1
Packing group		III
Road	UK	Poison
	ADR	Item Code 60° (C)
Sea	IMO	IMDG page 6079
Air	ICAO	IMDG page 6079

15. Regulatory Information

EC Supply Labelling	Harmful	
R Phrases	R22	Harmful if swallowed
S Phrases	S20/21	When using do not eat, drink or smoke.
	S24/25	Avoid contact with skin and eyes.
	S26	In case of contact with eyes rinse immediately with plenty of water and seek medical advice.
	S28	After contact with skin, wash immediately with plenty of water.

UK Occupational exposures limits (Refer to HSE Guidance note EH40)	**Mg/m^3**	**8 hr TWA**	**% in product**
Barium compounds (as Ba)		0.5	70

In accordance with HSE Approved Code of Practice for CHIP, the recipient is reminded of their obligations under both the Health and Safety at Work Act (HSWA) and the Control of Substances Hazardous to Health Regulations (COSHH), and that the information in any safety data sheet does not constitutes the user's assessment of workplace risk.

16. Other Information

References	
COSHH ACOP	HSC approved Code of Practice for the Control of Substances Hazardous to Health Regulations 1994.
CHIP 96	Chemicals (Hazard Information and Packaging for Supply) Regulations 1996
CHIP SDS ACOPS	HSC Approved Code of Practice for Safety data Sheets in accordance with regulation 6 of the CHIP regulations.
HSE EH40	HSE Guidance note EH40 on Occupational Exposure Limits to be used in conjunction with the COSHH regulations.