

Safety Data Sheet

Note: Read and understand Safety Data Sheet before handling or disposing of product.

1. CHEMICAL PRODUCT AND COMPANY INFORMATION

Material Identity: Sulfate Reagent (1 milliliter liquid in capped vials)
Synonym: UN No. 1564
Product Use: Laboratory/test kit reagent. Laboratory chemicals (not for food or food contact)
Manufacturer: **CHLOR RID International, Inc.**
3356 N. San Marcos Place #107
Chandler AZ 85225
Emergency Number: 800-422-3217, 480-821-0039 Revised: 6/2016

2. HAZARD IDENTIFICATION

Acute toxicity - Oral

Category 4

GHS Label:

Signal Word: WARNING

Hazard Statement:

See also Section 4.



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid breathing dust/fume/gas/mist/vapors/spray. Use only outdoors or in a well-ventilated area.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF ON SKIN: Wash with plenty of soap and water

Take off contaminated clothing and wash before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell, Rinse mouth

Precautionary Statements - Disposal

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

Other Hazards

Harmful to aquatic life with long lasting effects

Read the entire SDS for more thorough evaluation of precautions required.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Gum arabic	9000-01-5	0.4
Barium chloride dihydrate	10326-27-9	9
Citric acid monohydrate	5949-29-1	15

4. FIRST AID MEASURES

First Aid Measures

General advice	Show this safety data sheet to the doctor in attendance. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapors/spray.
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.
Skin contact	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. If symptoms persist, call a physician.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician immediately.
Ingestion	Induce vomiting, but only if victim is fully conscious. Call a physician immediately. Never give anything by mouth to an unconscious person.
<u>Self-protection of the first aider</u>	Use personal protection recommended in Section 8. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

5. FIRE-FIGHTING MEASURES/ EXPLOSIVE HAZARDS

Suitable extinguishing media

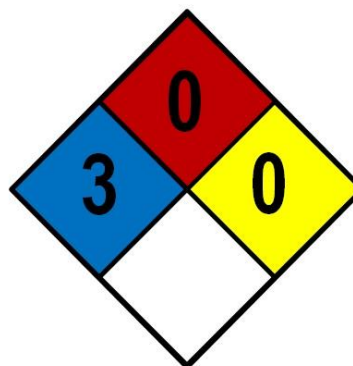
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

National Fire Protection Hazard Ratings- NFPA(R)

3 Health Hazard-
0 Flammability-
0 Reactivity -



6. ACCIDENTAL RELEASE MEASURE

Procedure in case of accidental release, breakage or leakage: INFOTRAC 800-535-5053

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing.

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Dispose of contents/containers in accordance with local regulations. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

Methods for cleaning up Clean contaminated surface thoroughly. Following product recovery, flush area with water.

Comply with local, state, and federal regulations for waste disposal. If permissible, flush to drain.

7. HANDLING AND STORAGE

Handling Ensure adequate ventilation. Avoid contact with eyes, skin and clothing. Do not eat, drink or smoke when using this product. See section 8.

Conditions for safe storage, including any incompatibilities

Storage Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep away from heat.

Incompatible Products Strong oxidizing agents. Acids.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Gum arabic 9000-01-5	-	-	Not Established
Barium chloride dihydrate 10326-27-9	TWA: 0.5 mg/m ³	TWA: 0.5 mg/m ³	IDLH: 50 mg/m ³ TWA: 0.5 mg/m ³
Citric acid monohydrate 5949-29-1	-	-	Not Established

Appropriate engineering controls

Engineering Measures Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Wear safety glasses with side shields (or goggles).

Skin and body protection Gloves & Lab Coat. Impervious clothing. Protective gloves. Nitrile rubber.

Respiratory protection

Handle in an enclosing hood with exhaust ventilation. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Hygiene Measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	liquid		
Appearance	Colorless	Odor	None

<u>Property</u>	<u>Values</u>
pH	3

Melting point / freezing point	No information available
Boiling point / boiling range	No information available

Flash point	No information available
Evaporation rate	No information available

Flammability (solid, gas)	No information available
Flammability Limit in Air Upper	No information available

flammability limit:	No information available
Lower flammability limit:	No information available

Vapor pressure	No information available
Vapor density	No information available

Specific gravity	No information available
Water solubility	No information available

Solubility in other solvents	No information available
Partition coefficient	No information available

Autoignition temperature	No information available
Decomposition temperature	No information available

Kinematic viscosity	No information available
Dynamic viscosity	No information available

Explosive properties	No information available
Oxidizing properties	No information available

Other Information	
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Softening point	No information available
Molecular weight	No information available

VOC Content (%)	No information available
Density	No information available

Bulk density	No information available
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10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
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Hazardous Reactions	Contact with acids liberates very toxic gas.
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Hazardous polymerization	Hazardous polymerization does not occur.
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Conditions to avoid	Incompatible Products.
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Incompatible materials	Strong oxidizing agents. Acids.
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Hazardous decomposition products	Hydrogen chloride. Carbon oxides (COx). Barium oxides.
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Do not use inconsistent with intended use. Keep out of reach of children and untrained users.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Gum arabic 9000-01-5	> 16 g/kg (Rat)	Not Established	Not Established
Barium chloride dihydrate 10326-27-9	= 118 mg/kg (Rat)	Not Established	Not Established
Citric acid monohydrate 5949-29-1	= 3000 mg/kg (Rat)	Not Established	Not Established

Information on toxicological effects

Sensitization No information available

Chemical name	ACGIH	IARC	NTP	OSHA
Gum arabic 9000-01-5	-	Not Established	Not Established	-
Barium chloride dihydrate 10326-27-9	-	Not Established	Not Established	-
Citric acid monohydrate 5949-29-1	-	Not Established	Not Established	-

Chronic toxicity Repeated ingestion has caused liver and kidney damage in animals.

ATEmix (oral) 4.2 mg/l

12. ECOLOGICAL INFORMATION

Ecotoxicity

Unknown Aquatic Toxicity 0.4 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

Chemical name	Toxicity to Algae	Toxicity to Fish	Daphnia Magna (Water Flea)
Gum arabic 9000-01-5	Not Established	Not Established	Not Established
Barium chloride dihydrate 10326-27-9	Not Established	Not Established	14.5: 48 h Daphnia magna mg/L EC50
Citric acid monohydrate 5949-29-1	Not Established	1516: 96 h Lepomis macrochirus mg/L LC50 static	120: 72 h Daphnia magna mg/L EC50

Persistence and degradability No information available.

Bioaccumulation/Accumulation No information available.

Chemical name	Log Pow
Gum arabic 9000-01-5	Not Established
Barium chloride dihydrate 10326-27-9	Not Established
Citric acid monohydrate 5949-29-1	-1.72

13. DISPOSAL INFORMATION

Disposal Methods

This material, as supplied, is a hazardous waste according to federal regulations (40 iCFR 261) Dispose according to federal, state, and local regulations.

Contaminated packaging

Do not reuse empty containers.

Chemical name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Gum arabic 9000-01-5	Not Established	-	Not Established	Not Established
Barium chloride dihydrate 10326-27-9	(hazardous constituent - no waste number)	-	Not Established	Not Established
Citric acid monohydrate 5949-29-1	Not Established	-	Not Established	Not Established
Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Gum arabic 9000-01-5	Not Established	Not Established	Not Established	Not Established
Barium chloride dihydrate 10326-27-9	Not Established	Not Established	Not Established	Not Established
Citric acid monohydrate 5949-29-1	Not Established	Not Established	Not Established	Not Established
Chemical name			California Hazardous Waste Status	
Gum arabic 9000-01-5			-	
Barium chloride dihydrate 10326-27-9			-	
Citric acid monohydrate 5949-29-1			-	

14. TRANSPORT INFORMATION

DOT

Proper shipping name BARIUM COMPOUNDS, N.O.S. (30% Barium chloride)
UN-No 1564
Hazard Class 6.1
Packing group III

IATA

Proper shipping name BARIUM COMPOUNDS, N.O.S. (30% Barium chloride)
UN-No 1564
Hazard Class 6.1
Packing group III

IMDG/IMO

Proper shipping name BARIUM COMPOUNDS, N.O.S. (30% Barium chloride)
UN-No 1564
Hazard Class 6.1
Packing group III

15. REGULATORY INFORMATION

International Inventories

TSCA	Does not comply
DSL/NDSL	Does not comply
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	SARA 313 - Threshold Values %
Gum arabic 9000-01-5	Not Established
Barium chloride dihydrate 10326-27-9	1.0
Citric acid monohydrate 5949-29-1	Not Established

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Gum arabic 9000-01-5	Not Established	Not Established	Not Established	Not Established
Barium chloride dihydrate 10326-27-9	Not Established	Not Established	Not Established	Not Established

Citric acid monohydrate 5949-29-1	Not Established	Not Established	Not Established	Not Established
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CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive

Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	RQ
Gum arabic 9000-01-5	-	Not Established	-
Barium chloride dihydrate 10326-27-9	-	Not Established	-
Citric acid monohydrate 5949-29-1	-	Not Established	-

US State Regulations

This product does not contain any Proposition 65 chemicals **U.S. State Right-to-Know Regulations**

Chemical name	New Jersey	Massachusetts	Pennsylvania
Gum arabic 9000-01-5	Not Established	Not Established	Not Established
Barium chloride dihydrate 10326-27-9	X	Not Established	X
Citric acid monohydrate 5949-29-1	Not Established	Not Established	Not Established

16. OTHER INFORMATION

HMIS _____ **Health hazard** 3 **Flammability** 0 **Stability** 1

It is the responsibility of the buyer to maintain a safe workplace for the user. Personal protective rating to be supplied by user depending on use condition. The user should consider the health safety information contained herein as a guide and should take these precautions required in an individual operation to instruct employees and develop protective work procedures for a safe environment.

The information contained herein is, to the best of our knowledge, accurate based on data available at the time of publication. The company accepts no liability for damages incurred.

Nothing herein is to be construed as a warranty, expressed or implied. It is the responsibility of the user to determine the applicability of the information herein and suitability for its own particular purpose.

CHLOR RID International Inc 800-422-3217	3356 N. San Marcos Place #107 480-821-0039	Chandler, AZ 85225 USA 480-821-0364 fax
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