

Barium sulfate**11432-1KG**

Version 1.2

Revision Date 06/13/2022

Print Date 05/11/2023

SECTION 1. IDENTIFICATION

Product name : Barium sulfate

Number : 000000021294

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : powder

Color : white

Odor : odourless

Classification of the substance or mixture

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

Precautionary statements : **Prevention:**
Use personal protective equipment as required.

Hazards not otherwise : Repeated or prolonged exposure may irritate eyes, skin and

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classified respiratory system.

Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
Barium sulfate	7727-43-7	100.00 %

SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Get medical attention if symptoms occur.

Inhalation : Move to fresh air. If symptoms persist, call a physician.

Skin contact : If on skin, rinse well with water. Wash off with soap and plenty of water.

Eye contact : Rinse with plenty of water. Remove contact lenses.

Ingestion : Rinse mouth. Drink 1 or 2 glasses of water. Call a physician immediately.

Notes to physician

Most important symptoms/effects, acute and delayed : No information available.

Indication of immediate medical attention and special treatment needed, if : Treat symptomatically.

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necessary

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Water spray
Foam
Alcohol-resistant foam
Dry powder
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : The product itself does not burn.
- Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.
- Further information : In the event of fire and/or explosion do not breathe fumes. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Ensure adequate ventilation.
Avoid dust formation.
Do not breathe dust.
Avoid contact with skin and eyes.
Keep people away from and upwind of spill/leak.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
Retain and dispose of contaminated wash water.
- Methods and materials for containment and cleaning up : Use mechanical handling equipment.
Sweep up and shovel into suitable containers for disposal.
Dispose of absorbed material in accordance with the regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

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Precautions for safe handling : Provide sufficient air exchange and/or exhaust in work rooms.
Avoid dust formation.
Do not breathe dust.
Avoid contact with skin and eyes.

Advice on protection against fire and explosion : The product itself does not burn.
Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : When using do not eat, drink or smoke.
Wash hands before breaks and at the end of workday.
Recommended preventive skin protection
Do not breathe dust.
Avoid contact with skin and eyes.

Engineering measures : Use with local exhaust ventilation.

Eye protection : Safety glasses with side-shields

Hand protection : Gloves must be inspected prior to use.
Replace when worn.
Wear suitable gloves.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Respiratory protection : Respiratory protection complying with EN 143.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Wash hands before breaks and at the end of workday.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
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Further information	:	Form of exposure : Total dust.			
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Barium sulfate	7727-43-7	TWA : Time weighted average	15 millions of particles per cubic foot of air	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Respirable fraction.			
------------------------	---	---	--	--	--

Barium sulfate	7727-43-7	TWA : Time weighted average	15 mg/m3	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Total dust.			
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Barium sulfate	7727-43-7	TWA : Time weighted average	5 mg/m3	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
----------------	-----------	-----------------------------------	---------	------------	---

Further information	:	Form of exposure : Respirable fraction.			
------------------------	---	---	--	--	--

Barium sulfate	7727-43-7	TWA : Time weighted average	5 mg/m3 The value is for particulate matter containing no asbestos and <1% crystalline silica.	02 2014	ACGIH:US. ACGIH Threshold Limit Values, as amended
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Further information	:	Form of exposure : Inhalable fraction.			
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Barium sulfate	7727-43-7	REL : Recomm ended exposure limit (REL):	10 mg/m3	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards, as amended
----------------	-----------	---	----------	------	---

Further information	:	Form of exposure : Total
------------------------	---	--------------------------

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Further information	:	Form of exposure : Respirable.
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Barium sulfate	7727-43-7	PEL : Permissi ble exposure limit	15 mg/m3	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Total dust.
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Barium sulfate	7727-43-7	PEL : Permissi ble exposure limit	5 mg/m3	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Respirable fraction.
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Barium sulfate	7727-43-7	TWA : Time weighted average	5 mg/m3	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
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Further	:	Form of exposure : Respirable fraction.
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Further information	:	Form of exposure : Total			

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Further information	:	Form of exposure : Respirable fraction.			
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Further information	:	Form of exposure : Total dust.			
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Barium sulfate	7727-43-7	:	Listed	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Respirable fraction.			
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Barium sulfate	7727-43-7	:	Listed	03 2016	Z3:US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
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Further information	:	Form of exposure : Total dust.			
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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state	: powder
Color	: white
Odor	: odourless
Odor threshold	: Note: No data available
pH	: Note: No data available
Melting point (decomposition)	: 1,580 °C
Boiling point/boiling range	: Note: No data available
Flash point	: Note: Not applicable
Evaporation rate	: Note: No data available
Flammability	: The product is not flammable.
Flammable properties	: Note: The substance or mixture does not emit flammable gases in contact with water.
Lower explosion limit	: Note: Not applicable
Upper explosion limit	: Note: Not applicable
Vapor pressure	: Note: No data available
Vapor density	: Note: No data available
Density	: ca. 4.400 g/cm ³ at 20 °C
Water solubility	: Note: insoluble

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Partition coefficient: n-octanol/water	: Note: No data available
Ignition temperature	: Note: Not applicable
Auto-ignition temperature	: Note: not auto-flammable
Viscosity, dynamic	: Note: Not applicable
Viscosity, kinematic	: Note: No data available
Oxidizing properties	: The substance or mixture is not classified as oxidizing.
Molecular weight	: 233.39 g/mol
Bulk density	: ca. 700 kg/m ³
Corrosivity	: Note: No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Not classified as a reactivity hazard.
Chemical stability	: Stable under recommended storage conditions.
Possibility of hazardous reactions	: With most metals.
Conditions to avoid	: To avoid thermal decomposition, do not overheat.
Incompatible materials	: Incompatible with oxidizing and reducing agents. Reactions with metals in powder form.
Hazardous decomposition products	: In case of fire hazardous decomposition products may be produced such as: Sulphur oxides Toxic metal oxide fumes

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SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	: LD50: > 5,000 mg/kg Species: Rat
Acute inhalation toxicity	: Note: No data available
Acute dermal toxicity	: Note: No data available
Skin irritation	: Note: Contact with dust can cause mechanical irritation or drying of the skin.
Eye irritation	: Note: Non persistent irritation Dust contact with the eyes can lead to mechanical irritation.
Sensitisation	: Note: No data available
Repeated dose toxicity	: Note: No data available
Genotoxicity in vitro	: Note: No data available
Carcinogenicity	: Species: not specified Note: No data available
Reproductive toxicity	: Species: not specified Note: No data available

SECTION 12. ECOLOGICAL INFORMATION

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Ecotoxicity effects

Toxicity to fish : Note: Aquatic toxicity is unlikely due to low solubility.

Toxicity to daphnia and other aquatic invertebrates : Note: No data available

Toxicity to algae : Note: No data available

Elimination information (persistence and degradability)

Biodegradability : Note: The methods for determining biodegradability are not applicable to inorganic substances.

Further information on ecology**Ecotoxicology Assessment**

Results of PBT assessment

This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information : Product is insoluble in water.
May be separated mechanically in waste water plants.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

DOT Not dangerous goods

TDG Not dangerous goods

IATA Not dangerous goods

IMDG Not dangerous goods

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SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemicals Act (AICC), as amended : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) : On the inventory, or in compliance with the inventory

National regulatory information

SARA 302 Components : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

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SARA 313 Components : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards : Acute Health Hazard

CERCLA Reportable Quantity :

California Prop. 65 : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Massachusetts RTK : Barium sulfate 7727-43-7

New Jersey RTK : Barium sulfate 7727-43-7

Pennsylvania RTK : Barium sulfate 7727-43-7

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 1	1
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and

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may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 07/21/2017

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group