

# Material Safety Data Sheet

## Potassium Metabisulfite

ACC# 19450

### Section 1 - Chemical Product and Company Identification

**MSDS Name:** Potassium Metabisulfite

**Catalog Numbers:** P197-500, P269-12, P269-212, P269-500

**Synonyms:** Potassium Pyrosulfate; Dipotassium Disulfate; Pyrosulfurous Acid, Dipotassium Salt; Disulfurous Acid, Dipotassium Salt

**Company Identification:**

Fisher Scientific  
1 Reagent Lane  
Fair Lawn, NJ 07410

**For information, call:** 201-796-7100

**Emergency Number:** 201-796-7100

**For CHEMTREC assistance, call:** 800-424-9300

**For International CHEMTREC assistance, call:** 703-527-3887

### Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
16731-55-8	Potassium metabisulfite	100	240-795-3

### Section 3 - Hazards Identification

#### EMERGENCY OVERVIEW

Appearance: very slightly yellow crystalline powder.

**Warning!** Eye contact may result in permanent eye damage. May cause allergic respiratory reaction. Causes eye and respiratory tract irritation. Contact with acids liberates toxic gas. May cause skin irritation. Ingestion may result in an allergic reaction.

**Target Organs:** Respiratory system, eyes.

#### Potential Health Effects

**Eye:** Causes redness and pain. Causes severe burning pain and redness of the conjunctiva. Risk of serious damage to eyes.

**Skin:** May cause skin irritation. May be harmful if absorbed through the skin. May cause reddening of the skin.

**Ingestion:** May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May be harmful if swallowed. May cause worsening of asthma in asthmatics. Individuals sensitive to sulfides may experience stomach upset, tightness in the chest, or

**Inhalation:** Causes respiratory tract irritation. May cause asthmatic attacks due to allergic sensitization of the respiratory tract.

**Chronic:** Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

### Section 4 - First Aid Measures

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid if irritation develops or persists. Flush skin with plenty of soap and water.

**Ingestion:** Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

### Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Substance is noncombustible.

**Extinguishing Media:** Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

**Flash Point:** Not applicable.

**Autoignition Temperature:** Not applicable.

**Explosion Limits, Lower:** Not available.

**Upper:** Not available.

**NFPA Rating:** (estimated) Health: 2; Flammability: 0; Instability: 1

### Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with skin and eyes. Avoid ingestion and inhalation.

**Storage:** Store in a cool, dry place. Keep away from acids. Keep containers tightly closed.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Potassium metabisulfite	none listed	none listed	none listed

**OSHA Vacated PELs:** Potassium metabisulfite: No OSHA Vacated PELs are listed for this chemical.

### Personal Protective Equipment

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

## Section 9 - Physical and Chemical Properties

**Physical State:** Crystalline powder

**Appearance:** white - very slightly yellow

**Odor:** faint odor - sulfur dioxide odor

**pH:** 3.5-4.5 @ 5% aq. soln.

**Vapor Pressure:** Not available.

**Vapor Density:** Not available.

**Evaporation Rate:** Not available.

**Viscosity:** Not available.

**Boiling Point:** Not available.

**Freezing/Melting Point:** 190 deg C

**Decomposition Temperature:** Not available.

**Solubility:** Appreciable solubility in water.

**Specific Gravity/Density:** Not available.

**Molecular Formula:** K<sub>2</sub>S<sub>2</sub>O<sub>5</sub>

**Molecular Weight:** 222.3136

## Section 10 - Stability and Reactivity

**Chemical Stability:** Contact with acids liberates toxic gas, Sulfur oxides.

**Conditions to Avoid:** Incompatible materials, dust generation.

**Incompatibilities with Other Materials:** Strong acids, water, metals, nitrates.

**Hazardous Decomposition Products:** Oxides of potassium, sulfur oxides (SO<sub>x</sub>), including sulfur oxide and sulfur dioxide.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

### RTECS#:

**CAS#** 16731-55-8: TT4920000

### LD50/LC50:

Not available.

### Carcinogenicity:

CAS# 16731-55-8: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**Epidemiology:** According to IARC, there is inadequate evidence for the carcinogenicity in humans of metabisulfites.

**Teratogenicity:** No data available.

**Reproductive Effects:** In laboratory studies, potassium metabisulfite has caused reduced weight gain in newborn rats. TDLo = 35 gm/kg.

**Mutagenicity:** In experimental systems, potassium metabisulfite has been observed to cause unscheduled DNA synthesis in rats when administered orally at a dose of 400 mg/kg.

**Neurotoxicity:** No data available.

**Other Studies:**

## Section 12 - Ecological Information

No information available.

## Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

## Section 14 - Transport Information

	US DOT	Canada TDG
<b>Shipping Name:</b>	Not Regulated	Not Regulated
<b>Hazard Class:</b>		
<b>UN Number:</b>		
<b>Packing Group:</b>		

## Section 15 - Regulatory Information

### US FEDERAL

#### TSCA

CAS# 16731-55-8 is listed on the TSCA inventory.

#### Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

#### Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

#### CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

#### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

#### SARA Codes

CAS # 16731-55-8: immediate.

#### Section 313

No chemicals are reportable under Section 313.

#### Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 16731-55-8 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

### European/International Regulations

#### European Labeling in Accordance with EC Directives

#### Hazard Symbols:

XI

#### Risk Phrases:

R 31 Contact with acids liberates toxic gas.

R 37 Irritating to respiratory system.

R 41 Risk of serious damage to eyes.

#### Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 39 Wear eye/face protection.

S 50A Do not mix with acids.

#### WGK (Water Danger/Protection)

CAS# 16731-55-8: 1

#### Canada - DSL/NDSL

CAS# 16731-55-8 is listed on Canada's DSL List.

#### Canada - WHMIS

This product has a WHMIS classification of D1B, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List**

CAS# 16731-55-8 is listed on the Canadian Ingredient Disclosure List.

**Section 16 - Additional Information**

**MSDS Creation Date:** 12/12/1997

**Revision #4 Date:** 6/01/2006

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