



POTASSIUM METABISULFITE

1 – IDENTIFICATION OF SUBSTANCE / PREPARATION AND COMPANY

Substance

Chemical Term	Potassium Metabisulfite
Commercial names and synonyms	Potassium Metabisulfite Potassium Piro-sulfite - Potassium Bisulfite Anhydrous
Chemical Abstract Terminology	Potassium Acid Sulfite

Uses

Food preserver – Component for photography processing

Company's telephone

Tel. +39 0421-200-455

Antidote Center

Ospedale Civile Pordenone +39 0434-3991

2 - COMPOSITION / INFORMATION ON INGREDIENTS

CAS Number	16731-55-8
CE Number	240-795-3
Formula	$K_2S_2O_5$
Classification	Xi, R31, R37, R41, S8, S26

3 – HAZARDS IDENTIFICATION

Substance classified as dangerous by current regulations.

Health hazards	Risk of serious injuries to eyes. Irritant to respiratory system. When in contact with acids, it liberates sulfur dioxide (SO ₂) toxic gas.
Environment hazards	It may cause a reduction of oxygen in waters with negative results for live organisms.
Physical and chemical dangers	Non flammable product. Low risk level.
Fire and explosion	In case of fire in the vicinity, it may develop sulfur dioxide (SO ₂) toxic gas.

4 – FIRST AID INTERVENTIONS

The immediate intervention of a physician is necessary.

Inhalation	Carry the person to the open air. If the respiration is difficult, supply oxygen or proceed with resuscitation techniques.
Contact with skin	Remove contaminated clothes. Wash with plenty of water.
Contact with eyes	Wash immediately with running water with open eyelids for at least 15 minutes. Consult a specialist.
Ingestion	Make ingest water. Consult a physician.

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5 – FIRE PREVENTION

Suggested extinction means	Non flammable. Use water in case of fire in the vicinities.
Extinction means to be avoided	None
Dangers deriving from combustion byproducts	Sulfur Dioxide
Protection devices in case of intervention	Breathing apparatus.
Other information	The water used for fire extinguishing, if contaminated by the product, must be disposed of in respect of local regulations.

6 – PROCEEDING IN CASE OF CASUAL DISPERSION

Collection and cleaning methods	<u>Small quantities:</u> wash with water and treat the polluted water by oxidizing it with hydrogen peroxide and neutralizing with soda. <u>Big quantities:</u> collect mechanically in suitable containers.
Individual protections	Provide suitable ventilation. Wear suitable protection clothes.
Environment protection	Prevent the product from reaching the sewerage or canals.

7 – HANDLING AND STORAGE

Handling	Keep the containers sealed in order to avoid oxidation of the product. Avoid dust formation.
Storage	Store in fresh, dry and ventilated place. Do not store it close to acids, oxidizing products or other products able to liberate acids.

8 - PERSONAL PROTECTION / EXPOSURE CONTROL

Respiratory Protection	Anti-dust mask (P1 filter)
Skin Protection	
Hands Protection	Safety gloves
Eyes Protection	Safety glasses with side protection. Do not wear contact lenses.
Exposure limits	TLV - TWA: not known (5 mg/m ³ referred to SO ₂) (ACGIH 1993-94)

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9 – CHEMICAL / PHYSICAL PROPERTIES

Appearance	Physical state	Crystals
	Color	White
Odor		Feeble of sulfur dioxide
Melting point		At about 150°C starts decomposition
Boiling point		n.a.
Specific gravity on loose product		1.20 kg/dm ³
Solubility in water		450 g/l H ₂ O a 20°C
Inflammation point		n.a.
Inflammation limits (vol % in air)		n.a.
Self-ignition temperature		n.a.
pH		3.5 - 4.5 (solution 5%)
Apportionment coefficient n-octanol/water		-4.0

10 – STABILITY AND REACTIVITY

Conditions to be avoided	Decomposition starts at about 150°C with liberation of SO ₂ .
Substances to be avoided	Acids - Oxidants - NaNO ₂ - NaNO ₃
Dangerous decomposition products	Sulfur dioxide

11 - TOXICOLOGICAL INFORMATION

Intake	Inhalation	Yes
	Ingestion	Event of scarce probability
	Contact	Yes
Acute toxicity	LD50 (oral, rat):	2.300 mg/kg
Consequences from inhalation		Irritation of respiratory system
Consequences from ingestion		Event of scarce probability
Local effect on skin		Irritation - Sensitization on people allergic to the product
Local effect on eyes		Irritation - Risk of serious injures to the eyes
Further information		n.a.

12 - ECOLOGICAL INFORMATION

The product, if discharged on superficial waters, may cause a significant reduction of oxygen, with negative outcomes for live organisms.

Toxicity to fish (acute toxicity) - Brachydamio rerio LC50: 460-1000 mg/l/96h

Bio- toxicity - Pseudomonas putida EC/LD50 (17h): 65 mg/l

COD: 140 mg/g

13 – REMARKS ON DISPOSAL

Product	Inorganic product, not to be disposed of through biological treatments. Dispose of residues in respect of regulations in force through authorized sites.
Contaminated packing	Empty at best by completely opening the bags. Dispose of bags in accordance to the bags type of material.

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14 – INFORMATION ON TRANSPORTATION

Product not subject to ADR/RID and IMO regulations.

Transport only with vehicles where the loading area is separated from the cabin. Make sure that the driver is informed about the potential risk of the material and what to do in case of accident or emergency.

15 – INFORMATION ON REGULATIONS

Labeling CE	<input type="checkbox"/>	By law
	<input checked="" type="checkbox"/>	Temporary
	<input type="checkbox"/>	Not required
Classification		Xi, R31, R37, R41, S8, S26

16 – FURTHER INFORMATION

Symbol of danger	Xi	Irritant
Sentences of risk	R 31	When in contact with acids it liberates toxic gas
	R 37	Irritant to the respiratory system
	R 41	Risk of serious injuries to eyes
Foresight suggestions	S 8	Keep out of humidity
	S 26	In case of contact with eyes, wash immediately with plenty of water and consult a physician

Risks related to sulfur dioxide: Gas toxic by inhalation, heavier than air. It may accumulate in closet spaces, particularly at floor level or beneath. At high concentration it is corrosive to the eyes, respiratory system and skin.

Before making use of this product in whatever new process or experiment, an exhaustive study must be carried on over safety and compatibility of the product itself to the materials which it may come in contact with.

Information contained in this MSDS is supplied with purpose of prevention and protection of health and safety within working sites. Responsibility over possible damages deriving from use of such information diverse from those mentioned above is not accepted.

Product: Potassium Metabisulfite
Data Sheet Code: POME(0105)01

Revision n° 1

Revision Date: 01/01/05
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