1. Product and Company Identification

Company: BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

24 Hour Emergency Response Information
Company: CANUTEC (reverse charges): (613) 996-6666
BASF HOTLINE: (800) 454-COPE (2673)

Molecular formula: K(2)S(2)O(5)
Synonyms: POTASSIUM METABISULFITE FOOD GRADE

2. Hazards Identification

**Emergency overview**

IRRITANT.
Irritating to eyes and respiratory system.

State of matter: solid
Colour: white
Odour: faint odour, of sulfur dioxide

**Potential health effects**

**Acute toxicity:**
Of low toxicity after single ingestion. Virtually nontoxic by inhalation. Virtually nontoxic after a single skin contact. The product has not been fully tested. The statements have been derived in parts from products of a similar structure or composition.

**Assessment other acute effects:**
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

**Sensitization:**
Skin sensitizing effects were not observed in animal studies. The product has not been tested. The statement has been derived from products of a similar structure or composition. A sensitizing effect on particularly sensitive individuals cannot be excluded.

**Chronic toxicity:**

**Carcinogenicity:** In long-term animal studies in which the substance was given in the drinking water in high doses, a carcinogenic effect was not observed.

**Repeated dose toxicity:** No known chronic effects.
Reproductive toxicity: The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Teratogenicity: No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Genotoxicity: No mutagenic effect was found in various tests with bacteria and mammalian cell culture. The substance was not mutagenic in a test with mammals. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Signs and symptoms of overexposure:
allergic symptoms
Risk of sulfur dioxide formation by reaction with gastric acid after swallowing.

Potential environmental effects

Aquatic toxicity:
The product may hydrolyse. The test result maybe partially due to degradation products.

Terrestrial toxicity:
Study does not need to be conducted.

3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Content (W/W)</th>
<th>Hazardous ingredients</th>
</tr>
</thead>
<tbody>
<tr>
<td>7681-57-4</td>
<td>0.5 - 1.5 %</td>
<td>Sodium metabisulfite</td>
</tr>
<tr>
<td>16731-55-8</td>
<td>60.0 - 100.0 %</td>
<td>dipotassium disulphite</td>
</tr>
</tbody>
</table>

4. First-Aid Measures

General advice:
Remove contaminated clothing.

If inhaled:
If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention. After inhalation of decomposition products: Immediately inhale corticosteroid dose aerosol.

If on skin:
Wash thoroughly with soap and water.

If in eyes:
Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:
Rinse mouth and then drink plenty of water.

Note to physician
Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
foam
Hazards during fire-fighting:
Sulphur dioxide,
The substances/groups of substances mentioned can be released if the product is involved in a fire.

Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

Further information:
Contaminated extinguishing water must be disposed of in accordance with official regulations. In case of fire and/or explosion do not breathe fumes.

Impact Sensitivity:
Remarks: Based on the chemical structure there is no shock-sensitivity.

6. Accidental release measures

Personal precautions:
Use personal protective clothing. Ensure adequate ventilation. Avoid dust formation. Avoid contact with eyes.

Environmental precautions:
Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

Cleanup:
Sweep/shovel up. Correctly dispose of recovered product immediately.

7. Handling and Storage

Handling
General advice:
Use only in well-ventilated areas. Avoid dust formation.

Protection against fire and explosion:
The substance/product is non-combustible. No special precautions necessary.

Storage
General advice:
Keep in a cool place. Keep container dry. Keep container in a well-ventilated place.

Storage incompatibility:
General advice: Segregate from acids and acid forming substances. Segregate from oxidants.
Specific chemicals to avoid:: sodium nitrate, sodium nitrite, sodium sulfide,

8. Exposure Controls and Personal Protection

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) particulate respirator.

Hand protection:
Chemical resistant protective gloves, Suitable materials

Eye protection:
Tightly fitting safety goggles (chemical goggles).
General safety and hygiene measures:  
Avoid inhalation of dust. Hands and/or face should be washed before breaks and at the end of the shift.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>powder</td>
</tr>
<tr>
<td>Odour</td>
<td>faint odour, of sulfur dioxide</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>pH value</td>
<td>3.8 - 4.6 (5 % (m))</td>
</tr>
<tr>
<td>Decomposition point</td>
<td>150 °C</td>
</tr>
<tr>
<td>Density</td>
<td>2.34 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>2.3 (20 °C)</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1,100 - 1,300 kg/m³</td>
</tr>
<tr>
<td>Partitioning coefficient</td>
<td>not applicable</td>
</tr>
<tr>
<td>n-octanol/water (log Pow)</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>not applicable</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>approx. 450 g/l (20 °C) hydrolyzes</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Conditions to avoid:  
Avoid humidity.

Substances to avoid:  
acids, oxidizing agents, nitrites, nitrates, sulfides

Hazardous reactions:  
Reacts with nitrites. Reacts with nitrates. Reacts with oxidizing agents.

Decomposition products:  
Hazardous decomposition products: Sulphur dioxide

Thermal decomposition:  
> 150 °C
To avoid thermal decomposition, do not overheat.

11. Toxicological information

Acute toxicity

Oral:  
Type of value: LD50  
Species: rat  
Value: approx. 2,300 mg/kg (BASF-Test)

Inhalation:  
Type of value: LC50  
Species: rat (male/female)  
Value: > 5.5 mg/l (OECD Guideline 403)  
Exposure time: 4 h  
Tested as dust aerosol. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Dermal:  
Type of value: LD50  
Species: rat (male/female)
Irritation / corrosion

Skin:
Species: rabbit
Result: non-irritant
Method: BASF-Test

Eye:
Species: rabbit
Result: Risk of serious damage to eyes.
Method: OECD Guideline 405

Sensitization:
Mouse Local Lymph Node Assay (LLNA)
Species: mouse
Result: Non-sensitizing.
Method: OECD Guideline 429

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aspiration Hazard:
not applicable

12. Ecological Information

Fish

Acute:
OECD 203; ISO 7346; 84/449/EEC, C.1 static
Brachydanio rerio/LC50 (96 h): = 460 - 1000 mg/l
Nominal concentration.

Chronic:
OECD Guideline 210 Flow through.
Brachydanio rerio /NOEC (34 d): >= 316 mg/l
The details of the toxic effect relate to the nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic invertebrates

Acute:
Directive 79/831/EEC static
Daphnia magna/EC50 (48 h): 89 mg/l
Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Chronic:
OECD Guideline 211 semistatic Daphnia magna (NOEC) 21 d > 10 mg/l
Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic plants

Toxicity to aquatic plants:
Algal growth inhibition test static
green algae/EC50 (72 h): 43.8 mg/l
Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.
Microorganisms
Toxicity to microorganisms:
OECD Guideline 209 aquatic
activated sludge of a predominantly domestic sewage/No observed effect concentration (180 min): \(\geq 1,000\) mg/l
Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Degradability / Persistence
Biological / Abiological Degradation
Evaluation: Inorganic product which cannot be eliminated from water by biological purification processes.

Other adverse effects:
Higher concentrations of the substance may cause a strong chemical oxygen consumption in biological sewage-treatment plants and/or waterways. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

13. Disposal considerations

Waste disposal of substance:
Contact manufacturer regarding recycling. Contact waste centre regarding recycling. Must be disposed of or incinerated in accordance with local regulations.

Container disposal:
Contaminated packaging should be emptied as far as possible; then it can be passed on for recycling after being thoroughly cleaned.

14. Transport Information

Land transport
TDG
Not classified as a dangerous good under transport regulations

Sea transport
IMDG
Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO
Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations
Registration status:
16. Other Information

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

MSDS Prepared by:
BASF NA Product Regulations

BASF HOTLINE (800) 454 – COPE (2673)
MSDS Prepared on: 2012/03/19

END OF DATA SHEET