According to Canadian Hazardous Products Regulations and WHMIS 2015

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Sulfur Flowers,

## **SECTION 1: Identification**

Product identifier

**Product name:** Sulfur Flowers, **Product code:** \$25596B

## Recommended use of the product and restriction on use

**Relevant identified uses:** Not determined or not applicable. **Uses advised against:** Not determined or not applicable.

**Reasons why uses advised against:** Not determined or not applicable.

### Manufacturer or supplier details

Manufacturer: Supplier:

AquaPhoenix Scientific Fisher Science Education 860 Gitts Run Road 6771 Silver Crest Road

Hanover Nazareth
PA 17331 PA 18064
(717) 632-1291 800 955-1177

## **Emergency telephone number:**

**United States** 

Emergency Telephone No.: 800-255-3924

## **SECTION 2: Hazard identification**

### **GHS** classification:

Flammable solids, category 2 Skin irritation, category 2

## **Label elements**

#### **Hazard pictograms:**





Signal word: Warning

### **Hazard statements:**

H228 Flammable solid H315 Causes skin irritation

### **Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking

P240 Ground/bond container and receiving equipment

P241 Use explosion-proof electrical/ventilating/light/equipment

P280 Wear protective gloves/protective clothing/eye protection/face protection

P264 Wash skin thoroughly after handling

P370+P378 In case of fire: Use agents recommended in section 5 for extinction

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## Sulfur Flowers,

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 If on skin: Wash with soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

Hazards not otherwise classified: None

## **SECTION 3: Composition/information on ingredients**

Identification	Name	Weight %
CAS number: 7704-34-9	Sulfur	100

Additional Information: None

## **SECTION 4: First-aid measures**

# **Description of first-aid measures**

#### General notes:

Not determined or not available.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position

Maintain an unobstructed airway

Get medical advice/attention if you feel unwell

## After skin contact:

Rinse affected area with soap and water

If symptoms develop or persist, seek medical attention

Wash affected area with soap and water

Seek medical attention if symptoms develop or persist

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes

If symptoms develop or persist, seek medical attention

## **After ingestion:**

Rinse mouth thoroughly

Seek medical attention if irritation, discomfort, or vomiting persists

### Most important symptoms and effects, both acute and delayed

# Acute symptoms and effects:

Not determined or not available.

#### **Delayed symptoms and effects:**

Not determined or not available.

### Immediate medical attention and special treatment

## **Specific treatment:**

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

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#### Sulfur Flowers,

## **SECTION 5: Fire-fighting measures**

#### **Extinguishing media**

### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

## Unsuitable extinguishing media:

Not determined or not applicable.

### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

#### **Special protective equipment for firefighters:**

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

#### Special precautions:

Carbon monoxide and carbon dioxide may form upon combustion Heating causes a rise in pressure, risk of bursting and combustion

#### **SECTION 6: Accidental release measures**

### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation

Ensure air handling systems are operational

Wear protective eye wear, gloves and clothing

## **Environmental precautions:**

Should not be released into the environment

Prevent from reaching drains, sewer or waterway

## Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Sweep or scoop up solid material while minimizing dust generation

Dispose of contents / container in accordance with local regulations

#### Reference to other sections:

Not determined or not applicable.

### **SECTION 7: Handling and storage**

#### Precautions for safe handling:

Use only with adequate ventilation.

Avoid breathing dust.

Do not eat, drink, smoke or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Keep container dry.

Store in a cool, well-ventilated area.

### **SECTION 8: Exposure controls/personal protection**

Only those substances with limit values have been included below.

## Occupational Exposure limit values:

According to Canadian Hazardous Products Regulations and WHMIS 2015

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### Sulfur Flowers,

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Canada	Sulfur	7704-34-9	8-hour TWA: 10 mg/m <sup>3</sup>

### **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

## Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls.

Biological monitoring may also be appropriate for some substances.

## **Appropriate engineering controls:**

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

#### Personal protection equipment

### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

#### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

## **Respiratory protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

### General hygienic measures:

Avoid contact with skin, eyes and clothing.

Wash hands before breaks and at the end of work.

Wash contaminated clothing before reuse.

## **SECTION 9: Physical and chemical properties**

## Information on basic physical and chemical properties

Appearance (physical state, color):	Yellow solid
Odor:	Rotten egg-like
Odor threshold:	Not available.
pH-value:	Not available.
Melting/Freezing point:	113°C
Boiling point/range:	444.7 °C (832.5 °F)
Flash point:	207 °C (405 °F)
Evaporation rate:	Not applicable.
Flammability (solid, gaseous):	Flammable solid
Explosion limit upper:	46.0%
Explosion limit lower:	3.3%
Vapor pressure:	10 hPa (8 mmHg) at 246 °C (475 °F) 1 hPa (1 mmHg) at 183.8 °C (362.8 °F)

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## **Sulfur Flowers,**

Vapor density:	Not applicable.
Density:	Not available.
Relative density:	2.07
Solubilities:	Insoluble in water
Partition coefficient (n-octanol/water):	Not available.
Auto/Self-ignition temperature:	232 °C (450 °F)
Decomposition temperature:	Not available.
Dynamic viscosity:	Not available.
Kinematic viscosity:	8 mm2/s at 140 °C (284 °F)
Explosive properties	Not available.
Oxidizing properties	Not available.

#### Other information

Molecular Weight	32.06

# **SECTION 10: Stability and reactivity**

### Reactivity:

Does not react under normal conditions of use and storage.

## **Chemical stability:**

Stable under normal conditions of use and storage.

### Possibility of hazardous reactions:

None under normal conditions of use and storage.

### **Conditions to avoid:**

Excess heat, ignition source or flames.

### **Incompatible materials:**

None known.

### Hazardous decomposition products:

None known.

## **SECTION 11: Toxicological information**

#### **Acute toxicity**

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

#### Skin corrosion/irritation

**Assessment:** Causes skin irritation **Product data:** No data available.

Substance data:

Name	Result
Sulfur	Irritating to the skin.

## Serious eye damage/irritation

**Assessment:** Based on available data, the classification criteria are not met.

Product data: No data available.

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#### Sulfur Flowers,

Substance data: No data available.

## Respiratory or skin sensitization

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

#### Carcinogenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

International Agency for Research on Cancer (IARC): None of the ingredients are listed.

National Toxicology Program (NTP): None of the ingredients are listed.

## Germ cell mutagenicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

## Reproductive toxicity

**Assessment:** Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

## Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available. Substance data: No data available.

### Specific target organ toxicity (repeated exposure)

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

## **Aspiration toxicity**

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Information on likely routes of exposure: No data available.

Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

### **SECTION 12: Ecological information**

### Acute (short-term) toxicity

Assessment: Based on available data, the classification criteria are not met.

**Product data:** No data available. **Substance data:** No data available.

Chronic (long-term) toxicity

**Product data:** No data available. **Substance data:** No data available.

### Persistence and degradability

According to Canadian Hazardous Products Regulations and WHMIS 2015

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## **Sulfur Flowers,**

**Product data:** No data available. **Substance data:** No data available.

### **Bioaccumulative potential**

**Product data:** No data available. **Substance data:** No data available.

### Mobility in soil

Product data: No data available.
Substance data: No data available.
Other adverse effects: No data available.

## **SECTION 13: Disposal considerations**

## **Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

## **SECTION 14: Transport information**

# **Canadian Transportation of Dangerous Goods (TDG)**

UN number	UN 1350
UN proper shipping name	Sulfur
UN transport hazard class(es)	4.1
Packing group	III
Environmental hazards	None
Special precautions for user	None

# **International Maritime Dangerous Goods (IMDG)**

UN number	UN 1350	
UN proper shipping name	Sulphur	
UN transport hazard class(es)	4.1	
Packing group	III	
Environmental hazards	None	
Special precautions for user	None	

## International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN 1350	
UN proper shipping name	Sulphur	
UN transport hazard class(es)	4.1	
Packing group	III	

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## Sulfur Flowers,

Environmental hazards	None
Special precautions for user	None

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code			
Bulk Name None			
Ship type	None		
Pollution category	None		

## **SECTION 15: Regulatory information**

## **Canada regulations**

## **Domestic substances list (DSL):**

7704-34-9	Sulfur	Listed

Non-domestic substances list (NDSL): Not determined.

## **SECTION 16: Other information**

### **Abbreviations and Acronyms: None**

#### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

**NFPA:** 2-2-0 **HMIS:** 2-2-0

Initial preparation date: 02.15.2018

**End of Safety Data Sheet**