

# Sulphur Pastilles

## Safety Data Sheet

Date of issue: 01/03/2021

Revision No:1

Next Revision date: 01/03/2023

### SECTION 1: Identification

#### 1.1. Identification

Product form : Solid pastilles  
Product name : Sulphur, Elemental Sulfur, Brimstone  
CAS-No. : 7704-34-9  
Product code : N/A

#### 1.2. Recommended use and restrictions on use

Recommended use : Sulphur product  
Restrictions on use : Not for food, drug or household use

#### 1.3. Manufacturer

**Manufacturer Name** : **National company for sulphur products**  
: **Address:** National Company For Sulphur Products,  
Head Office: P.O Box 2951, Riyadh 11461  
Email: [ncsp@ncsp.com.sa](mailto:ncsp@ncsp.com.sa)  
Tel :011 4647711 Fax: 2170866  
**Factory:** 3<sup>rd</sup> Industrial Area - Dammam

#### 1.4. Emergency telephone number

Emergency number : Tel :011 4647711 Fax: 2170866

### SECTION 2: Hazard(s) identification

#### 2.1. Classification of the substance or mixture

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Combustible dust - Category 1;  
Acute toxicity (Dermal) - Category 4;  
Skin irritation - Category 2;  
Eye irritation - Category 2A;  
Skin sensitization - Category 1B

#### 2.2. GHS Label elements, including precautionary

##### statements

Label Elements



**Danger**

May form combustible dust concentrations in air.  
Causes skin and eye irritation.  
May be harmful if swallowed, in contact with skin or if inhaled.  
Other Hazards : None known.

### SECTION 3: Composition/Information on ingredients

#### 3.1. Substances

Chemical Name	CAS No.	EC No.	%
Sulphur	7704-34-9	231-722-6	99.5-100

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the

classification of the substance and hence require reporting in this section.

Type:

[A] Constituent [B] Impurity [C] Stabilizing additive

Occupational exposure limits, if available, are listed in Section 8.

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

### 4.2. Most important symptoms and effects (acute and delayed)

If in eyes	: May cause moderate to severe irritation. Symptoms include sore, red eyes, and tearing.
If on skin	: May cause mild to moderate irritation
If inhaled	: Can irritate the nose and throat.

### 4.3. Immediate medical attention and special treatment, if necessary

Target Organs None known.

Special Instructions Treat symptomatically.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable Extinguishing Media	: Water spray or fog is preferred If water is not available, use Carbon dioxide, dry chemical powder or appropriate foam. Small fires may be smothered with sand.
Unsuitable Extinguishing Media Avoid	: scattering spilled material with high pressure water streams.

### 5.2. Specific hazards arising from the chemical

Flammable solid.

Combustion products include Sulphur Dioxide and Hydrogen Sulphide.

### 5.3. Special protective equipment and precautions for fire-fighters

Wear positive pressure self-contained breathing apparatus (SCBA) Structural firefighters' protective clothing will only provide limited protection.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary.

Hydrogen Sulphide is heavier than air and may collect in low lying areas and confined spaces.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment. Use the personal protective equipment recommended in Section 8 of this safety data sheet.

### 6.2. Environmental precautions

Prevent uncontrolled release to the environment.

### 6.3. Methods and material for containment and cleaning up

Avoid generating dust. Avoid dry sweeping. If necessary, use a dust suppressant such as water. Do not use compressed air for clean-up.

### 6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Avoid generating dusts.

Avoid breathing in this product.

Avoid repeated or prolonged skin contact.

Do not get in eyes

## 7.2. Conditions for safe storage, including any incompatibilities

Store in an area that is : cool, well-ventilated, out of direct sunlight and away from heat and ignition sources.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

It is recommended to observe national allowed occupational exposure limits. Where not established, the following long-term exposure limits are recommended: - sulphur dust – 6 mg/m<sup>3</sup> ; - SO<sub>2</sub> – 5 mg/m<sup>3</sup>

### 8.2. Appropriate engineering controls

At ambient temperature sulphur evolves small amounts of toxic dust and gas. However, during granular sulphur transfer, sulphur dust may be generated. In case of fire, toxic SO<sub>2</sub> gas is emitted. Toxic material concentrations in the air of working environment should be controlled to the minimum allowed limit.

### 8.3. Individual protection measures/Personal protective equipment

- Eye Protection : Wear safety goggles if contact of sulphur dust with eyes may occur (e.g. acc. to EN 166).
- Skin and Body Protection Hand Protection : Acid-resistant gloves (e.g. acc. to EN 388, EN 374-2, EN 374-3).
- Other Protective Measures : It is necessary, wear protective clothing (e.g. acc. to EN 11612, EN 1149-5), gloves and other protective equipment. Heat and acid resistant clothes and boots should be worn to avoid thermal burns when handling molten hot sulphur. Cover your face, head and neck. Protective clothing and equipment should be regularly inspected and maintained.
- Special Hygienic Recommendations : Wash hands before breaks and after work.
- Environmental Impact Control : To ensure the compliance of ventilation and process equipment with requirements of environmental legal acts, emissions of such equipment are subject to check-ups.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

- Physical state : Solid
- Appearance : Solid.
- Colour : Yellow.
- Odour : Characteristic.
- Odour threshold : No data available
- pH : No data available
- Relative evaporation rate (butylacetate=1) : No data available
- Melting / freezing point : 112-120 °C
- Freezing point : No data available
- Initial boiling point and boiling range : 444-447 °C SRPS EN ISO 3405
- Flash point : 168 - 207 °C SRPS EN ISO 2719
- Auto-ignition temperature : 232 °C
- Decomposition temperature : No data available
- Flammability (solid, gas) : Flammable
- Vapour pressure : 0,1333 Pa @20°C
- Vapour density : 1,79 (Air=1)
- Relative density : 1,811 - 2,34 g/cm<sup>3</sup> @15 °C
- Solubility : Water: Insoluble
- Partition coefficient n-octanol/water : No data available
- Kinematic viscosity : No data available
- Dynamic viscosity : No data available
- Explosive properties : Not applicable. The study does not need to be conducted because there are no chemical groups associated with explosive properties present in the molecule.
- Oxidising properties : Not applicable. The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with oxidising properties.
- Explosive limits : 35-1400 g sulfur dust/m<sup>3</sup> air

### 9.2. Other information

Minimum ignition energy : >=

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions. Reference to other sections: 10.5..

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

At high temperatures :H<sub>2</sub>S. Vapours may form explosive mixture with air.

### 10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. See also section 7 : Handling and storage

### 10.5. Incompatible materials

Oxidising substances. Acids. Bases . Strong bases. See also section 7 : Handling and storage .

### 10.6. Hazardous decomposition products

SO<sub>x</sub>. Hydrogen sulfide (H<sub>2</sub>S).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Not classified (Based on available data, the classification criteria are not met.)

#### Sulfur (7704-34-9)

LD50/oral/rat	> 2000 mg/kg
LD50/dermal/rat	> 2000 mg/kg
LD50/dermal/rabbit	> 2000 mg/kg
LC50/inhalation/4h/rat	> 5430 mg/m <sup>3</sup>
LC50 inhalation rat (Vapours - mg/l/4h)	5,43 mg/l/4h

#### Hydrogen sulphide (H<sub>2</sub>S) (7783-06-4)

LC50/inhalation/4h/rat	: 0,99 mg/l (Exposure time: 1h)
Skin corrosion/irritation	: Causes skin irritation.
pH	: No data available
Serious eye damage/irritation	: Not classified (Based on available data, the classification criteria are not met.)
Respiratory or skin sensitisation	: Not classified (Based on available data, the classification criteria are not met.)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met.)
Carcinogenicity	: Not classified (Based on available data, the classification criteria are not met.)
Reproductive toxicity	: Not classified (Based on available data, the classification criteria are not met.)
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met.)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met.)
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met.)
Other information	: Symptoms related to the physical, chemical and toxicological characteristics. Reference to other sections: 4.2.

## SECTION 12: Ecological information

### 12.1. Toxicity

Sulfur is not classified as environmentally hazardous, but this does not eliminate the possibility that excessive or large spills can have harmful or damaging effects on the environment.

### 12.2. Persistence and degradability

No specific data available

### 12.3. Bioaccumulative potential

No specific data available

### 12.4. Mobility in soil

No specific data available

### 12.5. Other adverse effects

No specific data available

## SECTION 13: Disposal Consideration

### 13.1. Disposal methods

Under RCRA it is the responsibility of the user of the product to determine at the time of disposal whether the product meets RCRA criteria for hazardous waste. Waste management should be in full compliance with federal, state and local laws.

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. Return drums to reclamation centers for proper cleaning and reuse.

## SECTION 14: Transport information

Not regulated under Canadian TDG regulations.

Not regulated under US DOT Regulations.

Environmental

Not applicable

Hazards Special Precautions

Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## SECTION 15: Regulatory information

CAS	Chemical Name	% By Weight	Regulation List
0007704-34-9	SULFUR	99% - 100%	SARA312,TSCA,TX_ESL,TX_TCEQ
0007783-06-4	HYDROGEN SULFIDE	0.00% - 0.99%	SARA312,SARA313,TSCA,TX_ESL,TX_TCEQ,ACGIH,OSHA I

## SECTION 16: Other information

Preparation date : 01-January-2021

Revision date : 01-January-2023

Prepared by : National Company for Sulphur Products- Riyadh

### Disclaimer

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 may not be valid for such material used in combination with any other materials or in any process, unless specified in the text