

according to 1907/2006/EC, Article 31

1. Identification of the substance/mixture and of the company

Product identifier

Identification on the label / trade name:

Sulfur

EC: 231-722-6

CAS: 7704-34-9

Additional identification:

liquid sulfur; sulphur

REACH registration number:

01-2119487295-27-0125

Relevant identified uses of the substance and uses advised against:

producing sulphuric acid, polysulphide (see attached list)

Manufacturer/Supplier: ISD Kokszołó Kft.

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Information: see Section 16 (Contact)

Emergency telephone number: (+3625) 2558.1060

2 Hazards identification

Classification of the substance

According to Dangerous Substances Directive (67/548/EEC):

F: R11; Xi: R36/37/38



F: Flammable



Xi: Irritation

Label elements according to CLP regulations EC/1272/2008

Hazard pictograms:



Flammable



Irritation



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Signal word:

Class: Danger

Hazard codes:

F; Xi

R-statements:

R 11-36/37/38

R phrases:

R11 Highly flammable

R36/37/38 Irritating to eyes, respiratory system and skin

Hazard statements:

H315 Causes skin irritation

Precautionary statements:

P264 Wash hands thoroughly after handling

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

P302+P352 IF ON SKIN: Wash with soap and water

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

P362 Take off contaminated clothing and wash before reuse

3 Composition/information on ingredients

Chemical characterisation:

Hazard ingredient: Sulphur

CAS: 7704-34-9, EC: 231-722-6

Concentration: 99%

4 First aid measures

In case of inhalation: Burning feeling, irritation of the nose, throat. Coughing.

Prevention: Local exhaust ventilation or use breathing apparatus.

First aid: Move victim to fresh air, calm and sitting. Obtain medical attention IMMEDIATELY.

In case of skin contact: Flushing red skin.

Prevention: Protective gloves.

First aid: Flush skin with lukewarm running water Start flushing while removing contaminated clothing.

In case of eye contact: Flushing red eyes.

Prevention: Safety eyewear, safety glasses should be used when there is a likelihood of exposure.

First aid: Immediately flush eyes with running water (without lenses). Hold eyelids open during flushing. Obtain medical attention.

In case of ingestion: Flush stomach, diarrhoea.

Prevention: Do not eat, drink or smoke during working.

First aid: Rinse victim's mouth and give a glass of water to dilute material. Transport victim to an emergency facility.



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5 Fire-fighting measures

Flammability of the product:

Flammable solid.

Keep away from heat, sparks and flame. To avoid fire, eliminate ignition sources.

Extinguishing media:

Water spray jet, foam, extinguishing powder, dry sand.

Extinguishing media which must not be used for safety reasons:

Full water jet on liquid sulfur – because of risk of explosion with steam.

Special remarks on explosion hazards:

Easily ignitable, combustible solid. Dust suspended in air ignites easily and can cause an explosion. Hazardous in contact with oxidizing materials, forming explosive mixtures.

Use closed system. Avoid electrostatic charging by grounding.

Special protective equipment for fire-fighters:

Wear a self-contained breathing apparatus with P2 filter.

Additional information:

Keep containers cool with water spray.

6 Accidental release measures

Personal precautions:

Remove all sources of ignition. Provide adequate ventilation. Wear breathing apparatus (with P2 filter) if exposed to dust. Wear personal protection equipment.

Environmental precautions:

Leakage:

Close the leaking location if safe to do.

Living waters - rivers:

If liquid material is released than experts must be applied to collect it. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Consider initial downwind evacuation.

Stagnant waters - lakes:

There is no hazardous effect known.

Soil:

Solid sulfur is not dangerous. Liquid sulfur has to be cool down, in an emergency pothole. ELIMINATE all ignition sources.

Methods and material for containment and cleaning up:

Collect in closed and suitable containers for disposal. If necessary wet it to avoid dust formation.

7 Handling and Storage

Precaution for safe handling:

This substance is handled under Strictly Controlled Conditions in accordance with REACH regulation Article 18(4) for transported isolated intermediates.



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Technical measures:

Keep away from sources of ignition and heat. To avoid fire, eliminate ignition sources.
No smoking. Take precautionary measures against static discharges.

General health and safety measures:

Wash hands before breaks and on finishing work. Remove contaminated, saturated clothing.
Do not eat, drink, smoke or take snuff while working.

Conditions for safe storage:

Suitable material for containers and pipes: stainless steel. Keep container tightly closed.
Ensure adequate ventilation of the storage area. Store in a place accessible by authorized persons only.

Specific end use:

No specific end uses, as this substance is an intermediate.

8 Exposure controls / Personal protection

Exposure limitation:

There is no limit declared.

Exposure controls

Occupational exposure controls:

Regular personal monitoring is required

Respiratory protection:

Personal protection: dust mask, airpurifying half-mask or full-face piece respirator equipped with P2 dust cartridges if concentrations are high or unknown.

Eye protection:

Safety glasses and/or face-protector, eye rinsing cup close to workplace.

Skin protection:

Wear personal protective coat or coveralls, shoes, protective gloves complying with material..

Environmental exposure controls:

Not necessary.

See the attached *Chemical Safety Report*.

9 Physical and chemical Properties

General information on basic properties

Physical state:

on ambient temperature: solid

on higher temperature liquid

Color: yellow, light brown

Important parameters according to health and environment:

Density: 1,8—2,1g/dm³

Melting-point: 115°C

Boiling point: 445°C

Flash point: 160°C



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Auto Flammability: 260°C (in liquid phase)
Explosion limits (dust in air): lower: 35g/m³, upper: 1400g/m³
Other information: n.a.

10 Stability and Reactivity

Stability:

The product is stable.

Released on air can burn, but flash point is relatively high. Melted, liquid sulfur reacts with hydrocarbons forming explosive and toxic gases.

Behavior in water:

Being higher density than water sulfur dips in water. Sulfur-dioxide (SO₂) produced during burning forms sulphurous acid (H₂SO₃) in water.

Hazardous decomposition products:

Burning with air produces toxic and smothering SO₂ gas.

11 Toxicological information

Acute toxic effects

Product irritates eyes, skin and respiratory organs. Breathing the sulfur dust may cause inflammation of nose or respiratory tracts.

Chronic toxic effects:

Repeated or long-term contact to skin may cause skin irritation. Chronic bronchitis, in serious case even lung oedema may happen.

12 Ecological information

Environmental effects :

In colloidal form sulfur impairs aquatic life.

SO₂ as a product of degradation toxic for fish and algae.

13 Disposal considerations

Waste is not hazardous.

14 Transport information

Land transport (ADR/RID/CDG Road/CDG Rail): 44/2448
UN Number: UN1350
Packing Group: III
Hazard Index Number: 44
Identity Number: 2448
Name: Sulfur (liquid)
Class: 4.1 III. F3
NHM Number: 250300
Tunnel code: E



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15 Regulatory information

R statement:

11-36/37/38

R phrases:

R11 Highly flammable

R36/37/38 Irritating to eyes, respiratory system and skin

Hazard statements:

H315 Causes skin irritation

S statement:

2-16-23-37/39

S phrases:

S1/2 Keep locked up / Keep out of the reach of children

S16 Keep away from sources of ignition - No smoking

S20/21 When using do not eat, drink or smoke

S23 Do not breathe dust/fumes/vapour

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S37/39 Wear suitable gloves and eye/face protection

Precautionary statements:

P264 Wash hands thoroughly after handling

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

P302+P352 IF ON SKIN: Wash with soap and water

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

P362 Take off contaminated clothing and wash before reuse

Hungarian regulation

2000. évi XXV. törvény a kémiai biztonságról

25/2000. (IX. 30.) EüM-SzCsM együttes rendelet a munkahelyek kémiai biztonságáról

44/2000. (XII. 27.) EüM rendelet a veszélyes anyagokkal és veszélyes készítményekkel kapcsolatos egyes eljárások, illetve tevékenységek részletes szabályairól

12/2001. (V. 4.) KöM-EüM együttes rendelet a vegyi anyagok kockázatának becsléséről és a kockázat csökkentéséről

*Regulations should be in accordance with applicable regional,
national and local laws and regulations.*



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16 Other information

Documentation of changes:

Revision of Material safety data sheet from 20.05.2011

Literature, References:

Registration Dossier

Department issuing data specification sheet:

Department of Technology

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Statement

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

The product is to be used exclusively for the applications named in the technical leaflet or in the processing instructions. The receiver of our product is singularly responsible for adhering to existing laws and regulations.