Safety Data Sheet
GROUND SULPHUR
Safety Data Sheet dated: 10/27/2022 - version 1

1. Identification

GHS Product Identifier

Mixture identification:

Trade name: GROUND SULPHUR, SULPHUR POWDER, SOLUBLE SULPHUR, GOFRIT 100, GOFRIT LEIUD

Recommended use of the chemical and restrictions on use

Recommended use: CURING AGENT
FOR INDUSTRIAL USE
FOR PROFESSIONAL USE

Uses advised against: N.A.

Supplier's details

Company:

ESSECO S.r.l. Via San Cassiano 99
28069 - Trecate (NO)
Italy
Phone: +39-0321-7901
Competent person responsible for the safety data sheet: sds@esseco.it

Emergency phone number

Esseco - Phone n. +39-0321-7901

2. Hazard identification

Classification of the substance or mixture

Skin Irrit. 2 Causes skin irritation.

Adverse physicochemical, human health and environmental effects:

No other hazards

GHS label elements, including precautionary statements

Pictograms and Signal Words

Warning

Hazard statements

H315 Causes skin irritation.

Precautionary statements

P280 Wear protective gloves/clothing.

P302+P352 IF ON SKIN: Wash with plenty of water.

P362+P364 Take off contaminated clothing and wash it before reuse.

Other hazards which do not result in a classification

No other hazards

3. Composition/information on ingredients

Substances

N.A.

Mixtures

Mixture identification: GROUND SULPHUR

Hazardous components within the meaning of GHS and related classification:

Qty	Name	Ident. Numb.	Classification	Registration Number
≥ 90 - < 100 %	SULFUR	CAS:7704-34-9 EC:231-722-6 Index:016-094-00-1	Skin Irrit. 2, H315	01-2119487295-27-XXXX

4. First-aid measures

Description of necessary first-aid measures

In case of skin contact:

Remove contaminated clothing immediatley and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of persistent skin irritation consult a doctor.

In case of eyes contact:

Irrigate eyes with copious amounts of water for at least 10-15 min, holding eyelids apart to ensure thorough rinsing

Protect uninjured eye.

Ask for medical advice.

If irritation, blurred vision or swelling occurs and persists, obtain medical advice from a specialist.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and hazard labelling.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

Most important symptoms/effects, acute and delayed

Eye irritation

Skin Irritation

Erythema

Indication of immediate medical attention and special treatment needed, if necessary

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

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5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

Foam, extinguishing powder, sprinkling water jet, carbon dioxide.

According to the materials involved in the fire.

Unsuitable extinguishing media:

Do not use direct water jets on the burning product;

Simultaneous use of foam and water on the same surface is to be avoided as water destroys the foam

Special hazards arising from the chemical

Do not inhale explosion and combustion gases.

Hazardous combustion products: Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S.

Explosive properties: N.A.

Oxidizing properties: N.A.

Special protective actions for fire-fighters

Wear suitable protective clothing (helmet, protective clothings, goggles, fire resistant gloves, boots) and protect respiratory organs (self contained breathing apparatus).

Use suitable breathing apparatus .

Move undamaged containers from immediate hazard area if it can be done safely.

Cool the containers exposed to the fire with water.

Stay upwind/keep distance from source

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

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6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non emergency personnel:

Avoid direct contact with released material

Keep non-involved personnel away from the area of spillage. Alert emergency personnel

For emergency responders:

Avoid direct contact with released material

Stop leak if safe to do so.

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

If the product has escaped into a water course, into the drainage system, or has contaminated the ground or vegetation, notify the competent authorities.

Methods and material for containment and cleaning up

Collect free product with suitable mechanical means.

Dispose of the collected material in accordance with the current regulations.

See also section 8 and 13

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes

Do not breathe dust. See, too, paragraph 8 below.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Keep containers tightly closed and properly labelled.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Avoid accumulating electrostatic charge.

Adequately ventilated premises.

8. Exposure controls/personal protection

Control parameters

Community Occupational Exposure Limits (OEL)

	OEL Type	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Notes
SULFUR CAS: 7704-34-9	ACGIH	10.000				inhalable fraction	
	ACGIH	3.000				respirable fraction	

Appropriate engineering controls:

N.A.

Individual protection measures, such as personal protective equipment (PPE)

Individual protection measures:

Personal protective equipment selections vary based on potential exposure conditions and working conditions.

The final choice of protective equipment will depend upon a risk assessment.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Please see both sections 5 and 6 for information about personal protective equipment to be worn in an emergency (e.g.: fire or unintentional release of the substance).

Eye protection:

Chemical risk goggles (with side protecion).

Technical reference standard: UNI EN 166

Protection for skin:

Wear chemical resistant clothing.

Technical reference standard: UNI EN 13034

Protection for hands:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Glove suitability and breakthrough time will differ depending on the specific use conditions.

Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions.

Wear suitable gloves tested to EN374.

Respiratory protection:

Depending on the potential for exposure, select respiratory protective equipment suitable for the specific conditions of use and in compliance with current legislation.

Particle filter device.

Thermal Hazards:

N.A.

Environmental exposure controls:

Comply with the applicable environmental regulations limiting discharge to air, water and soil.

9. Physical and chemical properties

Physical State: Solid
Appearance and colour: Solid Yellow
Odour: Rotten eggs
Odour threshold: N.A.
pH: N.A.
Melting point / freezing point: 110°-120°C
Initial boiling point and boiling range: 444°C
Flash point: 205 °C (401 °F)
Evaporation rate: N.A.
Flammability (Solid, Gas N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour pressure: N.A.
Vapour density: N.A.
Relative density: ±2 Kg/dm3
Solubility in water: Insoluble
Solubility in oil: N.A.
Partition coefficient (n-octanol/water: N.A.
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.

10. Stability and reactivity

Reactivity

Stable under normal conditions.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Stable under normal conditions.

Conditions to avoid

Stable under normal conditions.
Keep away from heat/sparks/open flames/hot surfaces.

Incompatible materials

See section 7.

Hazardous decomposition products

Sulphur dioxide

11. Toxicological information

Information on toxicological effects

Toxicological Information of the Preparation

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
	Skin Irritant Positive - Classification derived from the classification of the components
c) serious eye damage/irritation	Not classified
	Based on available data, the classification criteria are not met
d) respiratory or skin sensitisation	Not classified
	Based on available data, the classification criteria are not met
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	Not classified
	Based on available data, the classification criteria are not met
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	Not classified
	Based on available data, the classification criteria are not met

i) STOT-repeated exposure	Not classified	
	Based on available data, the classification criteria are not met	
j) aspiration hazard	Not classified	
	Based on available data, the classification criteria are not met	

Toxicological information on main components of the mixture:

SULFUR	a) acute toxicity	LC50 Inhalation Rat >= 5.43 mg/l 4h - Based on available data, the classification criteria are not met	OECD 403
		LD50 Oral Rat >= 2000 mg/kg - Based on available data, the classification criteria are not met	OECD 401
		LD50 Skin Rat >= 2000 mg/kg - Based on available data, the classification criteria are not met	EPA OPP 81-2
	b) skin corrosion/irritation	Skin Irritant Positive	OECD 404
	d) respiratory or skin sensitisation	Skin Sensitization Negative - Based on available data, the classification criteria are not met	OECD 406
	e) germ cell mutagenicity	Mutagenesis Negative - Based on available data, the classification criteria are not met	OECD 471 - Ames test
	i) STOT-repeated exposure	No Observed Adverse Effect Level Oral Rat 1000 mg/kg 90 days - Based on available data, the classification criteria are not met	OECD 408

12. Ecological information

Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards.

No data available for the product

List of Eco-Toxicological properties of the components

Component	Ident. Numb.	Ecotox Data
SULFUR	CAS: 7704-34-9 - EINECS: 231-722-6 - INDEX: 016-094-00-1	a) Aquatic acute toxicity : LC0 Fish Oncorhynchus mykiss > 5 µg/L 96h OECD 203
		a) Aquatic acute toxicity : NOEC Algae > 5 µg/L 72h OECD 201
		a) Aquatic acute toxicity : EC50 Daphnia > 5 µg/L 48h OECD 202
		b) Aquatic chronic toxicity : NOEC Daphnia > 100 mg/l 504h OECD 211

Persistence and degradability

N.A.

Bioaccumulative potential

N.A.

Mobility in soil

N.A.

Other adverse effects

N.A.

13. Disposal considerations

Disposal methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. Transport information

Not classified as dangerous in the meaning of transport regulations.

UN number

N.A.

UN proper shipping name

N.A.

Transport hazard class(es)

N.A.

Packing group, if applicable

N.A.

Environmental hazards

N.A.

Special precautions for user

N.A.

Road and Rail (ADR-RID):

N.A.

Air (IATA):

N.A.

Sea (IMDG):

N.A.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

15. Regulatory information

Safety, health and environmental regulations specific for the product in question

This Safety Data Sheet has been prepared according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Seventh revised edition.

16. Other information

Code	Description
H315	Causes skin irritation.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

Legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.

IMDG: International Maritime Code for Dangerous Goods.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).

GHS: Globally Harmonized System of Classification and Labeling of Chemicals.

CLP: Classification, Labeling, Packaging.

EINECS: European Inventory of Existing Commercial Chemical Substances.

INCI: International Nomenclature of Cosmetic Ingredients.

CAS: Chemical Abstracts Service (division of the American Chemical Society).

GefStoffVO: Ordinance on Hazardous Substances, Germany.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

DNEL: Derived No Effect Level.

PNEC: Predicted No Effect Concentration.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

WGK: German Water Hazard Class.

KSt: Explosion coefficient.