SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance
Trade name/designation : Granular Sulphur
EC Index : 016-094-00-1
EC-No. : 231-722-6
CAS-No. : 7704-34-9
REACH registration No. : 01-2119487295-27-0120
Formula : S
Product group : Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category : Industrial use,Professional use

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Supplier
NIS a.d. Novi Sad
Narodnog Fronta 12
21000 Novi Sad
Serbia
T + 381 (0) 21 481 1111
REACHNIS@nis.rs

Only Representative
BENS Consulting d.o.o.
Špruha 19
1236 Trzin
Slovenija
T +386 41 979 800
info@bens-consulting.eu

1.4. Emergency telephone number

Emergency number : + 381 (0) 21 481 1111
Only available during office hours.

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals-24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin corrosion/irritation, Category 2 H315
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS07

Signal word : Warning
Hazard statements (CLP) : H315 - Causes skin irritation.
Precautionary statements (CLP) : P264 - Wash hands thoroughly after handling.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P321 - Specific treatment (see supplemental first aid instruction on this label).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
Listed on CLP Annex VI : EC Index-No.: 016-094-00-1

2.3. Other hazards

Other hazards : Results of PBT and vPvB assessment : This substance does not meet the PBT/vPvB criteria of REACH, annex XIII. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance name : Granular Sulphur
CAS-No. : 7704-34-9
EC-No. : 231-722-6
EC Index : 016-094-00-1

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
sulfur	CAS-No.: 7704-34-9 EC-No.: 231-722-6 EC Index: 016-094-00-1 REACH-no: 01-2119485395-27-0120	≥ 99,2	Skin Irrit. 2, H315

Substance name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
hydrogen sulphide	CAS-No.: 7783-06-4 EC-No.: 231-977-3 EC Index: 016-001-00-4	< 0,001	Flam. Gas 1A, H220 Press. Gas (Comp.), H280 Acute Tox. 2 (Inhalation), H330 (ATE=440 ppm/4h) Aquatic Acute 1, H400

Full text of H- and EUH-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

Additional advice : First aider: Pay attention to self-protection!. Concerning personal protective equipment to use, see section 8. Never give anything by mouth to an unconscious person. In case of doubt or persistent symptoms, consult always a physician. Show this safety data sheet to the doctor in attendance.

Inhalation : Remove casualty to fresh air and keep warm and at rest. Give oxygen or artificial respiration if necessary. In case of doubt or persistent symptoms, consult always a physician.

Skin contact : Remove contaminated clothing and shoes. Gently wash with plenty of soap and water. Wash contaminated clothing before reuse. In case of doubt or persistent symptoms, consult always a physician.

Eyes contact : Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. In case of doubt or persistent symptoms, consult always a physician.

Ingestion : Do NOT induce vomiting. Rinse mouth thoroughly with water. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation : May cause respiratory irritation. The following symptoms may occur: Shortness of breath. Coughing, sneezes.

Skin contact : Causes skin irritation. Hot product (liquid) can cause thermal burns. The following symptoms may occur: Redness, pain.

Eyes contact : May cause eye irritation. Hot product (liquid) can cause thermal burns. The following symptoms may occur: Redness, pain.

Ingestion : May cause gastrointestinal irritation, nausea, vomiting and diarrhoea.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : carbon dioxide (CO2), powder, alcohol-resistant foam, water spray.

Unsuitable extinguishing media : Strong water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards	:	Not flammable. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.
Explosion hazard	:	Vapours may form explosive mixture with air. May form explosive dust-air mixture.
Hazardous decomposition products in case of fire	:	Hydrogen sulfide. Sulphur oxides. Nitrogen oxides. Carbon oxides (CO, CO2).

5.3. Advice for firefighters

Firefighting instructions	:	Evacuate area. Use water spray or fog for cooling exposed containers. Contain the extinguishing fluids by bunding. Prevent fire fighting water from entering the environment.
Protection during firefighting	:	Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus.
Other information	:	Do not allow run-off from fire-fighting to enter drains or water courses. Dispose of waste in accordance with environmental legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

For non-emergency personnel	:	Evacuate unnecessary personnel. Keep upwind. Provide adequate ventilation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Wear recommended personal protective equipment. Concerning personal protective equipment to use, see section 8. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ensure equipment is adequately earthed. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

6.1.2. For emergency responders

For emergency responders	:	Ensure procedures and training for emergency decontamination and disposal are in place. Concerning personal protective equipment to use, see section 8 .

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Stop leak if safe to do so. Dam up the solid spill. Take up mechanically (sweeping, shovelling) and collect in suitable container for disposal. Large spills: scoop solid spill into closing containers. This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8 . Concerning disposal elimination after cleaning, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Provide adequate ventilation. Do not breathe dust. Avoid contact with skin, eyes and clothing. Use personal protective equipment as required. Concerning personal protective equipment to use, see section 8. Take any precaution to avoid mixing with Incompatible materials, Refer to Section 10 on Incompatible Materials. Ensure proper process control to avoid excess waste discharge (temperature, concentration, pH, time). Avoid release to the environment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground and bond container and receiving equipment. Product may release Hydrogen Sulphide: A specific assessment of inhalation risks from the presence of hydrogen sulphide in tank headspaces, confined spaces, product residue, tank waste and waste water, and unintentional releases should be made to help determine controls appropriate to local circumstances.

Hygiene measures : Keep good industrial hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Do not eat, drink or smoke when using this product. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothes. Separate working clothes from town clothes. Launder separately. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container tightly closed. Store in a dry, cool and well-ventilated place. Do not store near or with any of the incompatible materials listed in section 10.

Incompatible materials : Oxidising substances. Acids. Bases. Strong bases.

Heat and ignition sources : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight.

Special rules on packaging : Containers which are opened should be properly resealed and kept upright to prevent leakage. Keep in properly labelled containers.

Packaging materials : Keep only in the original container. Recommended packaging materials : Carbon steel .

Germany

German storage class (LGK) : LGK 13 - Non-combustible solids

Switzerland

Storage class (LK) : LK 11/13 - Solids

7.3. Specific end use(s)

For further information see section 1.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

sulfur (7704-34-9)	
Latvia - Occupational Exposure Limits	
Local name	Sērs
OEL TWA	6 mg/m³
Regulatory reference	Ministru kabineta 2007. gada 15. maija noteikumiem Nr. 325 (Grozījumi Ministru kabineta 2024. gada 26. martā noteikumiem Nr. 191).
Lithuania - Occupational Exposure Limits	
Local name	Siera
IPRV (OEL TWA)	6 mg/m³
Remark	F (fibrogeninis poveikis)
OEL chemical category	Fibrogenic substance
Regulatory reference	LIETUVOS HIGIENOS NORMA HN 23:2011 (Nr. V-695/A1-272, 2018-06-12)
Romania - Occupational Exposure Limits	
Local name	Sulf
OEL STEL	15 mg/m³ (dust)
Regulatory reference	Hotărârea Guvernului nr. 1.218/2006 (Hotărârea nr. 179/2024)

hydrogen sulphide (7783-06-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Hydrogen sulphide
IOEL TWA	7 mg/m³
	5 ppm
IOEL STEL	14 mg/m³
	10 ppm
Regulatory reference	COMMISSION DIRECTIVE 2009/161/EU
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	7 mg/m³
	5 ppm
MAK (OEL STEL)	7 mg/m³
	5 ppm
OEL C	7 mg/m³
	5 ppm
Belgium - Occupational Exposure Limits	
Local name	Hydrogène (sulfure d') # Waterstofsulfide

hydrogen sulphide (7783-06-4)	
OEL TWA	2,3 mg/m³
	1,64 ppm
OEL STEL	5,61 mg/m³
	4 ppm
Regulatory reference	Koninklijk besluit/Arrêté royal 16/11/2023
Bulgaria - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Croatia - Occupational Exposure Limits	
GVI (OEL TWA)	7 mg/m³
	5 ppm
KGVI (OEL STEL)	14 mg/m³
	10 ppm
Cyprus - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³ (vapor)
	10 ppm (vapor)
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	7 mg/m³
Denmark - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Estonia - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Finland - Occupational Exposure Limits	
HTP (OEL TWA)	7 mg/m³
	5 ppm
HTP (OEL STEL)	14 mg/m³

hydrogen sulphide (7783-06-4)	
	10 ppm
France - Occupational Exposure Limits	
VME (OEL TWA)	7 mg/m³ (restrictive limit)
	5 ppm (restrictive limit)
VLE (OEL C/STEL)	14 mg/m³ (restrictive limit)
	10 ppm (restrictive limit)
Germany - Occupational Exposure Limits (TRGS 900)	
Occupational exposure limit value (mg/m³) (TRGS900)	2(I) 7,1 mg/m³ peak limitation : 2(I)
Occupational exposure limit value (ppm) (TRGS900)	5 ppm Y= There is no fertility risk if the threshold limit as well as the biological threshold limit (BGW) is met
Gibraltar - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Greece - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	7 mg/m³
CK (OEL STEL)	14 mg/m³
Ireland - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Italy - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Latvia - Occupational Exposure Limits	
OEL TWA	7 mg/m³

hydrogen sulphide (7783-06-4)	
	5 ppm
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	7 mg/m³
	5 ppm
TPRV (OEL STEL)	14 mg/m³
	10 ppm
NRV (OEL C)	20 mg/m³
	15 ppm
Luxembourg - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Malta - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	2,3 mg/m³
	1,64 ppm
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	7 mg/m³
NDSCh (OEL STEL)	14 mg/m³
Portugal - Occupational Exposure Limits	
OEL TWA	7 mg/m³ (indicative limit value)
	5 ppm (indicative limit value)
OEL STEL	14 mg/m³ (indicative limit value)
	10 ppm (indicative limit value)
Romania - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA)	7 mg/m³

hydrogen sulphide (7783-06-4)	
	5 ppm
NPHV (OEL C)	14 mg/m³
Slovenia - Occupational Exposure Limits	
OEL TWA	7 mg/m³
	5 ppm
OEL STEL	14 mg/m³
	10 ppm
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA)	7 mg/m³
	5 ppm
VLA-EC (OEL STEL)	14 mg/m³
	10 ppm
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	7 mg/m³
	5 ppm
KGV (OEL STEL)	14 mg/m³
	10 ppm
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA)	7 mg/m³
	5 ppm
WEL STEL (OEL STEL)	14 mg/m³
	10 ppm
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA)	7 mg/m³
	5 ppm
Takverdi (OEL C)	14 mg/m³
	10 ppm
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA)	7,1 mg/m³
	5 ppm
KZGW (OEL STEL)	14,2 mg/m³
	10 ppm
USA - ACGIH - Occupational Exposure Limits	
ACGIH® TLV® TWA	1 ppm
ACGIH® TLV® STEL	5 ppm

8.1.2. Recommended monitoring procedures

Monitoring methods	
Monitoring methods	Personal air monitoring. Room air monitoring.

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

Additional information : Recommended monitoring procedures :. Personal air monitoring. Room air monitoring

8.1.5. Control banding

No additional information available

8.2. Exposure controls

Engineering measure(s) : Provide adequate ventilation. Use with local exhaust ventilation. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Take precautionary measures against static discharges. Use only explosion-proof equipment. Organisational measures to prevent/limit releases, dispersion and exposure. See Section 7 for information on safe handling.

Personal protective equipment : The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hand protection : Wear chemically resistant gloves (tested to EN374) . Suitable material: rubber gloves, NBR (Nitrile rubber), Neoprene, Polyvinylchloride (PVC). Breakthrough time : >480 minutes. Thickness of the glove material: Not determined. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Eye protection : Use suitable eye protection (EN166): Safety glasses. face shield

Body protection : Wear suitable protective clothing : Wear sealed work clothes, chemical resistant. Overalls, apron and boots recommended.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Half-face mask (DIN EN 140). full face mask (DIN EN 136). Filter type: ABEK/P (EN14387). Self-contained open-circuit compressed air breathing apparatus (EN 137)

Thermal hazard protection : Not required for normal conditions of use. Use dedicated equipment.

Environmental exposure controls : Avoid release to the environment. Comply with applicable Community environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Colour : Yellow.

Appearance : Solid.

Odour : Characteristic.

Odour threshold	:	No data available
Melting / freezing point	:	112 – 120 °C
Freezing point	:	Not available
Initial boiling point and boiling range	:	444 – 447 °C (SRPS EN ISO 3405)
Flammability	:	Not flammable
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.
Lower explosion limit	:	Not applicable
Upper explosion limit	:	Not applicable
Flash point	:	168 – 207 °C (SRPS EN ISO 2719)
Auto-ignition temperature	:	232 °C
Decomposition temperature	:	No additional information available
pH	:	No data available
pH solution	:	Not available
Kinematic viscosity	:	No data available
Dynamic viscosity	:	No data available
Solubility	:	Insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	:	No data available
Vapour pressure	:	0,1333 Pa (20 °C)
Vapour pressure at 50°C	:	Not available
Density	:	Not available
Relative density	:	1,811 – 2,34 g/cm^3 (15 °C)
Vapour density	:	1,79 (Air=1)
Particle size	:	Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

Explosion limits	:	35 – 1400 g sulfur dust/m3 air

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions. Reference to other sections: 10.4 & 10.5.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

at high temperatures :H2S. Vapours may form explosive mixture with air.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from sunlight. See Section 7 for information on safe handling.

10.5. Incompatible materials

oxidising substances. Acids. Bases. Strong bases. See Section 7 for information on safe handling.

10.6. Hazardous decomposition products

Hydrogen sulfide. Sulphur oxides. Nitrogen oxides. Carbon oxides (CO, CO2). Reference to other sections 5.2.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

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

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

Acute toxicity (inhalation) : 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 (Source: IUCLID)
LC50/inhalation/4h/rat	> 5430 mg/m³
LC50 Inhalation - Rat (Vapours)	5,43 mg/l/4h

hydrogen sulphide (7783-06-4)	
LC50/inhalation/4h/rat	0,99 mg/l (Exposure time: 1h)
LC50/inhalation/4h/rat (ppm)	501 ppm/4h

Skin corrosion/irritation : Causes skin irritation.
pH: No data available

hydrogen sulphide (7783-06-4)	
pH	4,1 (conc: 0.1 N (aqueous solution)

Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: No data available

hydrogen sulphide (7783-06-4)	
pH	4,1 (conc: 0.1 N (aqueous solution)

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)

Granular Sulphur (7704-34-9)	
Kinematic viscosity	No data available

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Adverse health effects caused by endocrine disrupting properties	:	The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

11.2.2. Other information

Other information	:	Symptoms related to the physical, chemical and toxicological characteristics,For further information see section 4

SECTION 12: Ecological information

12.1. Toxicity

Environmental properties	:	According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment".
Hazardous to the aquatic environment, short–term (acute)	:	Not classified
Hazardous to the aquatic environment, long–term (chronic)	:	Not classified

sulfur (7704-34-9)	
LC50 - Fish [1]	866 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static] Source: IUCLID)
LC50 - Fish [2]	< 14 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static] Source: EPA)

hydrogen sulphide (7783-06-4)	
LC50 - Fish [1]	0,0448 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [flow-through])
LC50 - Fish [2]	0,016 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])

hydrogen sulphide (7783-06-4)	
EC50 - Crustacea [1]	0,022 mg/l

12.2. Persistence and degradability

Granular Sulphur (7704-34-9)	
Persistence and degradability	Expected to be biodegradable.

12.3. Bioaccumulative potential

Granular Sulphur (7704-34-9)	
Partition coefficient n-octanol/water (Log Kow)	No data available
Bioaccumulative potential	Low potential.

hydrogen sulphide (7783-06-4)	
BCF - Fish [1]	(no bioaccumulation expected)
Partition coefficient n-octanol/water	0,45 (at 25 °C)

12.4. Mobility in soil

Granular Sulphur (7704-34-9)	
Mobility in soil	No data available
Ecology - soil	Not applicable.

12.5. Results of PBT and vPvB assessment

Granular Sulphur (7704-34-9)	
Results of PBT assessment	This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

12.6. Endocrine disrupting properties

Adverse effects on the environment caused by endocrine disrupting properties : The substance is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Other adverse effects : No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of empty containers and wastes safely. See Section 7 for information on safe handling. Refer to manufacturer/supplier for information on recovery/recycling. Recycling is preferred to disposal or incineration. If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Handle contaminated packages in the same way as the substance itself. Dispose of contaminated materials in accordance with current regulations.

Additional information : Never use pressure to empty container. Do not burn, or use a cutting torch on the empty drum. Do not puncture or incinerate. Delivery to an approved waste disposal company.

European waste catalogue (2001/573/EC, 75/442/EEC, 91/689/EEC) : This material and its container must be disposed of as hazardous waste Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
1350	1350	1350	1350	1350
14.2. UN proper shipping name				
SULPHUR	SULPHUR	Sulphur	SULPHUR	SULPHUR
Transport document description				
UN 1350 SULPHUR, 4.1, III, (E)	UN 1350 SULPHUR, 4.1, III	UN 1350 Sulphur, 4.1, III	UN 1350 SULPHUR, 4.1, III	UN 1350 SULPHUR, 4.1, III
14.3. Transport hazard class(es)				
4.1	4.1	4.1	4.1	4.1
				
14.4. Packing group				
III	III	III	III	III
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

Special precautions for user : No data available

- Overland transport

Classification code (ADR) : F3

Special provisions : 242

Limited quantities (ADR) : 5kg

Excepted quantities (ADR) : E1

Packing instructions (ADR) : P002, IBC08, LP02, R001

Special packing provisions (ADR)	:	B3
Mixed packing provisions (ADR)	:	MP11
Portable tank and bulk container instructions (ADR)	:	T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR)	:	TP33
Tank code (ADR)	:	SGAV
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	3
Special provisions for carriage - Bulk (ADR)	:	VC1, VC2
Hazard identification number (Kemler No.)	:	40
Orange plates	:	40 1350
Tunnel restriction code	:	E
EAC code	:	1Z

- Transport by sea

Special provisions (IMDG)	:	242, 967
Limited quantities (IMDG)	:	5 kg
Excepted quantities (IMDG)	:	E1
Packing instructions (IMDG)	:	P002, LP02
IBC packing instructions (IMDG)	:	IBC08
IBC special provisions (IMDG)	:	B3
Tank instructions (IMDG)	:	T1, BK2, BK3
Tank special provisions (IMDG)	:	TP33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-G
Stowage category (IMDG)	:	A
Stowage and handling (IMDG)	:	SW1, SW23
Segregation (IMDG)	:	SG17
Properties and observations (IMDG)	:	When involved in a fire, evolves toxic, very irritating and suffocating gas. The dust forms an explosive mixture with air which may be ignited by static electricity. Forms explosive mixtures with oxidizing substances. Corrosive to steel, in particular in the presence of moisture. The provisions of this Code should not apply to sulphur when it is formed to a specific shape (such as prills, granules, pellets, pastilles or flakes).

- Air transport

PCA Excepted quantities (IATA)	:	E1
PCA Limited quantities (IATA)	:	Y443
PCA limited quantity max net quantity (IATA)	:	10kg
PCA packing instructions (IATA)	:	446
PCA max net quantity (IATA)	:	25kg
CAO packing instructions (IATA)	:	449

CAO max net quantity (IATA)	: 100kg
Special provisions (IATA)	: A105, A803
ERG code (IATA)	: 3L

- Inland waterway transport

Classification code (ADN)	: F3
Special provisions (ADN)	: 242
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: B
Equipment required (ADN)	: PP
Number of blue cones/lights (ADN)	: 0

- Rail transport

Classification code (RID)	: F3
Special provisions (RID)	: 242
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: B3
Mixed packing provisions (RID)	: MP11
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W1
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 40

14.7. Maritime transport in bulk according to IMO instruments

Code: IBC	: No data available.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

EU restriction list (REACH Annex XVII)		
Reference code	**Applicable on**	**Entry title or description**
40.	hydrogen sulphide	Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (2024/590)

Not listed on the Ozone Depletion list (Regulation EU 2024/590)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (EU 2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (EC 273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

Detergent Regulation (648/2004/EC): Labelling of contents

Labelling for contents according to regulation (EC) No. 648/2004 : Not applicable

15.1.2. National regulations

France

Installations classées			
No ICPE	Désignation de la rubrique	Code Régime	Rayon
na	Not Applicable	na	na

Germany

Water hazard class (WGK) : WGK 1, Slightly hazardous to water (Classification according to AwSV; ID No. 753).

Major Accidents Ordinance (12. BImSchV) : Is not subject to the Major Accidents Ordinance (12. BImSchV)

Netherlands

Waterbezwaarlijkheid : B (5) - Weinig schadelijk voor in het water levende organismen

SZW-lijst van kankerverwekkende stoffen : The substance is not listed

SZW-lijst van mutagene stoffen : The substance is not listed

SZW-lijst van reprotoxische stoffen – Borstvoeding : The substance is not listed

SZW-lijst van reprotoxische stoffen – Vruchtbaarheid : The substance is not listed

SZW-lijst van reprotoxische stoffen – Ontwikkeling : The substance is not listed

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

1.3	Details of the supplier of the safety data sheet	Modified	
3	Composition/information on ingredients	Update	

Abbreviations and acronyms:

	ADN = Accord Européen relatif au Transport International des Marchandises Dangereuses par voie de Navigation du Rhin ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route CLP = Classification, Labelling and Packaging Regulation according to 1272/2008/EC IATA = International Air Transport Association IMDG = International Maritime Dangerous Goods Code LEL = Lower Explosive Limit/Lower Explosion Limit UEL = Upper Explosion Limit/Upper Explosive Limit REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
	ABM = Algemene beoordelingsmethodiek
	BTT = Breakthrough time (maximum wearing time)
	DMEL = Derived Minimal Effect level
	DNEL = Derived No Effect Level
	EC50 = Median Effective Concentration
	EL50 = Median effective level
	ErC50 = EC50 in terms of reduction of growth rate
	ErL50 = EL50 in terms of reduction of growth rate
	EWC = European waste catalogue
	LC50 = Median lethal concentration
	LD50 = Median lethal dose
	LL50 = Median lethal level

	NA = Not applicable
	NOEC = No observed effect concentration
	NOEL: no-observed-effect level
	NOELR = No observed effect loading rate
	NOAEC = No observed adverse effect concentration
	NOAEL = No observed adverse effect level
	N.O.S. = Not Otherwise Specified
	OEL = Occupational Exposure Limits - Short Term Exposure Limits (STELs)
	PNEC = Predicted No Effect Concentration
	Quantitative structure-activity relationship (QSAR)
	STOT = Specific Target Organ Toxicity
	TWA = time weighted average
	VOC = Volatile organic compounds
	WGK = Wassergefährdungsklasse (Water Hazard Class under German Federal Water Management Act)

Sources of key data used to compile the datasheet : Supplier information. LOLI. ECHA (European Chemicals Agency).

Training advice : Manipulations are to be done only by qualified and authorised persons. Normal use of this product shall imply use in accordance with the instructions on the packaging. Training staff on good practice.

Other information : Hazard classification and labeling of petroleum substances in the European Economic Area, Concawe – 2025 (http://www.concawe.eu).

Full text of H- and EUH-statements:

Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Flam. Gas 1A	Flammable gases, Category 1A
Press. Gas (Comp.)	Gases under pressure : Compressed gas
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H220	Extremely flammable gas.
H280	Contains gas under pressure; may explode if heated.
H315	Causes skin irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.

According to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Labelling according to Regulation (EC) No. 1272/2008 [CLP]