



LAINZUFRE

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878
Issue date: 4/5/2022 Version: 1.0

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

1.1. Product identifier

Product form : Mixture
Trade name : LAINZUFRE
UFI : E4Q1-D9R7-W5SV-GHX8
Product code : 2302
Type of product : Plant protection products
Product group : End product

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : For professional use only
Use of the substance/mixture : Acaricides for plant protection
Fungicide

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Distributor

LAINCO, S.A.
Avinguda Bizet, 8-12
08191 Rubí – Barcelona
España
T +34 93 586 20 15 - F +34 93 586 20 16
lainco@lainco.es - <http://www.lainco.es>

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Spain	Servicio de Información Toxicológica Instituto Nacional de Toxicología y Ciencias Forenses, Departamento de Barcelona	C/Merced 1 08002 Barcelona	+34 91 562 04 20	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

Avoid generation and spreading of dust. Suspension of the dust in the air could produce an explosive atmosphere. Do not breathe dust.

2.2. Label elements

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

Precautionary statements (CLP) : P261 - Avoid breathing dust, mist.
P262 - Do not get in eyes, on skin, or on clothing.
P280 - Wear protective gloves, protective clothing, face protection.
EUH-statements : EUH210 - Safety data sheet available on request.
EUH401 - To avoid risks to human health and the environment, comply with the instructions for use.

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2.3. Other hazards

Other hazards which do not result in classification : May cause slight irritation in contact with skin and eyes.

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) 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 at a concentration equal to or greater than 0,1 %

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

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-No.: 016-094-00-1	80 – 90	Skin Irrit. 2, H315
sodium hydroxide; caustic soda	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6	1 – 5	Skin Corr. 1A, H314

Specific concentration limits:

Name	Product identifier	Specific concentration limits
sodium hydroxide; caustic soda	CAS-No.: 1310-73-2 EC-No.: 215-185-5 EC Index-No.: 011-002-00-6	(0.5 \leq C < 2) Skin Irrit. 2, H315 (0.5 \leq C < 2) Eye Irrit. 2, H319 (2 \leq C < 5) Skin Corr. 1B, H314 (5 \leq C \leq 100) Skin Corr. 1A, H314

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

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.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Move the affected person away from the contaminated area and into the fresh air. Give oxygen or artificial respiration if necessary.
First-aid measures after skin contact	: Take off contaminated clothing and wash it before reuse. Wash skin with plenty of water.
First-aid measures after eye contact	: Immediately rinse with water for a prolonged period while holding the eyelids wide open. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Do NOT induce vomiting. Give nothing or a little water to drink. Use a saturated solution of sodium bicarbonate in order to avoid the disulfhydic formation. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after inhalation	: Irritation of the respiratory tract. Sore throat, cough, headache. Respiratory difficulties.
Symptoms/effects after skin contact	: Skin irritation and erythema. Itching.
Symptoms/effects after eye contact	: Eye irritation. Redness.
Symptoms/effects after ingestion	: Sore throat. Abdominal pain. Other symptoms: Headache, dizziness, nausea, unconsciousness.

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

Antidote: If serious systemic effects appear, administer intravenous solution of sodium or Amyl nitrite (Pyridoxine IV 25mg/Kg). Contra indications: Syrup of ipecac.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Carbon dioxide. Water spray. Dry powder. Foam.
Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : In case of fire and/or explosion do not breathe fumes.
Explosion hazard : May explode on heating. Can react violently with heat and ignition sources.
Reactivity in case of fire : In contact with a fire may give off Sulfur derived harmful and flammable gases (H₂S, SOX...).
Hazardous decomposition products in case of fire : Toxic/flamable fumes could accumulate in confined areas. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

Precautionary measures fire : Keep container tightly closed and away from heat, sparks and flame. Eliminate all ignition sources if safe to do so.
Firefighting instructions : Fight fire from safe distance and protected location. Use water spray or fog for cooling exposed containers. Prevent fire fighting water from entering the environment. Exercise caution when fighting any chemical fire.
Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
Other information : On exposure to high temperature, may decompose, releasing toxic gases.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Notify authorities if product enters sewers or public waters. Stop leak if safe to do so. Avoid contact with skin and eyes. Do not handle until all safety precautions have been read and understood.

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area.
Measures in case of dust release : Prevent dispersion by moistening spill with water or foam. Sweep or shovel spills into appropriate container for disposal.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Prevent dispersion by moistening spill with water or foam. Collect spillage.
Methods for cleaning up : Mechanically recover the product. Sweep or shovel spills into appropriate container for disposal.
Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed	: During the application of the product, the operator will avoid contact with the wet foliage. Do not enter treated areas until the crop is completely dry.
Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Store in a well-ventilated place. Keep container tightly closed. Keep in a cool, well-ventilated place away from heat.
Storage conditions	: Store at temperatures not exceeding 40°C. Avoid handling which leads to dust formation. Can form explosive mixtures with air. Store in a well-ventilated place. Keep cool.
Incompatible products	: Store separated from chlorates, nitrates and other oxidizing materials. Forms high explosive mixtures with potassium chlorate and powder zinc. May react violently with oxidants. Do not mix with oils or alkaline reaction products. Do not mix with EC formulations.
Maximum storage period	: < 2 years
Storage temperature	: < 40 °C
heat and ignition sources	: Protect from heat and direct sunlight. No naked flames, sparks, and do not smoke. Avoid the warming over 32°C during more than 48 hours; it can produce an explosive decomposition.
Special rules on packaging	: Keep only in original container.
Packaging materials	: Keep only in the original container in a cool, well-ventilated place away from combustible materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

LAINZUFRE	
Spain - Occupational Exposure Limits	
Local name	Hidróxido de sodio
VLA-EC (OEL STEL)	2 mg/m ³
Regulatory reference	Límites de Exposición Profesional para Agentes Químicos en España 2021. INSHT

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

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8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing. Face shield.

Personal protective equipment symbol(s):



8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses		With side shields	EN 166
Full face piece respirator			

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Reusable gloves					EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

To protect aquatic organisms/non-target plants/non-target arthropods/insects respect an unsprayed buffer zone of (distance to be specified) to non-agricultural land/surface water bodies. Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: brown.
Appearance	: Granular solid.
Odour	: slightly sulphurous.
Odour threshold	: Not available
Melting point	: Not available
Freezing point	: Not applicable
Boiling point	: Not available
Flammability	: 207.2 °C Not readily ignited (EEC A.10) Non flammable.
Explosive properties	: Can form explosive mixtures with air.

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Oxidising properties	: Does not present oxidising properties.
Explosive limits	: Not applicable
Lower explosion limit	: 35 g/m ³ Sulfur
Upper explosion limit	: 400 g/m ³ Sulfur
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: 9.5 – 10.5 (1% Aqueous solution)
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Dispersible. Water: 0.063 mg/l active substance Organic solvent: Soluble in carbondisulfide. Soluble in aniline. Soluble in ammonia. Slightly soluble in: alcohols
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 0.7 – 0.85 g/ml Bulk density
Relative density	: Not available
Relative vapour density at 20 °C	: Not applicable
Particle size	: Not available
Particle size distribution	: Not available
Particle shape	: Not available
Particle aspect ratio	: Not available
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

Minimum ignition energy : < 158 mJ

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Oxidising agents. Store separated from chlorates, nitrates and other oxidizing materials. Forms high explosive mixtures with potassium chlorate and powder zinc.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

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LD50 oral rat	> 2000 mg/kg bodyweight Estimated on the basis of the constituents
LD50 dermal rabbit	> 2000 mg/kg bodyweight Estimated on the basis of the constituents
LC50 Inhalation - Rat (Dust/Mist)	> 1.35 mg/l/4h Estimated on the basis of the constituents

Skin corrosion/irritation	: Not classified. pH: 9.5 – 10.5 (1% Aqueous solution)
Serious eye damage/irritation	: Not classified pH: 9.5 – 10.5 (1% Aqueous solution)
Respiratory or skin sensitisation	: Not classified (Estimated on the basis of the constituents)
Germ cell mutagenicity	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: Sulfur : Not mutagenic (AMES Test)
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)

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NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight/day
Aspiration hazard	: Not classified (Based on available data, the classification criteria are not met)
Additional information	: Do not breathe dust

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Viscosity, kinematic	Not applicable
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11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
Hazardous to the aquatic environment, short-term (acute)	: Not classified
Hazardous to the aquatic environment, long-term (chronic)	: Not classified
Not rapidly degradable	
Additional information	: Based on available data, the classification criteria are not met. Risk to aquatic organisms is generally considered as low in the EU review due to the very low solubility of Sulfur in water, 0.063 mg/L, and because there was no effect detected at concentrations that clearly exceeded the solubility in water. Sulfur is not a highly toxic substance to aquatic organisms. It is expected to be quickly adsorbed on sediments after entering in the aquatic environment.

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12.2. Persistence and degradability

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Additional information	In plants it is transformed by microbial action in various oxidation steps, e.g. sulphate and sulphite, which are soluble and therefore available for absorption by plant. In soil and water, it is oxidized by the action of volatile oxides. Sulfur is an inorganic substance, which does not degrade in the environment. Therefore, metabolites are not expected. Sulfur is considered non-biodegradable. When it enters in a water system, it is expected to be adsorbed onto sediments and subsequently oxidized.
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12.3. Bioaccumulative potential

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Bioaccumulative potential	Not bioaccumulable.
Additional information	Not subject to bioaccumulation in fish or plants.

12.4. Mobility in soil

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Ecology - soil	Presents zero mobility on the ground, so there is a minimal risk of contaminating groundwater.
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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Endocrine disrupting properties

No additional information available

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations. Avoid release to the environment.
Additional information	: Clean up even minor leaks or spills if possible without unnecessary risk. Do not re-use empty containers.
European List of Waste (LoW) code	: 02 01 09 - agrochemical waste other than those mentioned in 02 01 08 15 01 00 - packaging (including separately collected municipal packaging waste)

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated

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ADR	IMDG	IATA	ADN	RID
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

Directive 2012/18/EU (SEVESO III)

Seveso Additional information : The product is not included in any of the categories described in annex I.

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances.

15.1.2. National regulations

Spain

Spanish National Regulations : Spanish Royal Decree 656/2017 and its modifications: Not included in the scope described in article 2 of the Royal Decree cited above.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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Data sources

: Supplier's safety documents. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. ECHA (European Chemicals Agency).

Full text of H- and EUH-statements:

EUH210	Safety data sheet available on request.
EUH401	To avoid risks to human health and the environment, comply with the instructions for use.
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1, Sub-Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2

The classification complies with

: ATP 12

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.