

MSDS (Material Safety Data Sheet)

Product name: Ortho Silicic Acid

Brand: Plant Vitales

Manufacturer: Kroon De Jager S.L.

In accordance with Regulation (EU) 2020/878 – Annex II (REACH)

UFI Number: WMH0-ACMW-5U1F-Q0XD

Version: 1.0

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

- Product identification: Ortho Silicic Acid – Plant Vitales
- Use of the substance or mixture: Liquid foliar fertilizer and soil improver for professional use in agriculture and horticulture.

- Details of the manufacturer / supplier:

Kroon De Jager S.L.

Pol. Ind. Bajo Sombra 18

03688 Hondón de las Nieves, Alicante, Spain

CIF: B67426049

✉ info@kroondejager.com

☎ +34 934 18 35 30

- Emergency number: 112

2. Hazard identification

- Classification according to Regulation (EC) 1272/2008 [CLP]:

o Acute tox. 4 – H302

o Skin Irrit. 2 – H315

o Eye Dam. 1 – H318

Signal word:

- Hazard pictograms



- Hazard statements:

o H302: Harmful if swallowed

o H315: Causes skin irritation

o H318: Causes serious eye damage

- Precautionary statements:

o P280: Wear protective gloves/eye protection

o P305+P351+P338: If in eyes: rinse cautiously with water

o P301+P312: If swallowed: if feeling unwell, seek medical advice

o P310: Immediately call a poison center or doctor

- Other hazards:

Not persistent/bioaccumulative. Not PBT/vPvB. Low pH (<2)

3. Composition / information on ingredients

Mixture: aqueous solution of mineral nutrients and stabilizers

Component	CAS	Function	REACH Registration Number
Potassium silicate	1312-76-1	Silicon source	01-2119456888-17-0023
PEG-400	25322-68-3	Stabilizer	01-2119490225-39-0000
Zinc sulfate	7733-02-0	Micronutrient	01-2119467174-37-0006
Copper sulfate	7758-99-8	Micronutrient	01-2119520566-40-0013
Manganese sulfate	7785-87-7	Micronutrient	01-2119456624-35-0002
Boric acid	10043-35-3	Micronutrient	01-2119486683-25-0022
Sodium molybdate	7631-95-0	Micronutrient	01-2119489491-28-0022
Sulfuric acid	7664-93-9	pH adjustment	01-2119458838-20-0006

4. First aid measures

- General: In case of doubt or if symptoms persist, consult a doctor.
- Inhalation: Fresh air, rest. Consult a doctor if symptoms occur.
- Eye contact: Rinse immediately with plenty of water, keep eyes open, seek medical help.
- Skin contact: Rinse with water, remove contaminated clothing.
- Ingestion: Rinse mouth. DO NOT induce vomiting. Seek medical help immediately.

5. Firefighting measures

- Suitable extinguishing media: Water mist, CO₂, foam
- Unsuitable: Direct water jet
- Hazardous combustion products: Sulfur oxides, metal oxides
- Personal protection: Full breathing apparatus, chemical suit

6. Accidental release measures

- Personal precautions: Use PPE (gloves, goggles)
- Environmental precautions: Prevent release into soil or water
- Clean-up method: Absorb with inert material (sand, vermiculite), dispose of according to section 13

7. Handling and storage

- Precautions for safe handling:
 - o Avoid contact with skin, eyes, and clothing
 - o Do not eat, drink, or smoke during use

- o Ensure good ventilation
 - Storage conditions:
 - o Store in a cool, dry, well-ventilated area
 - o Keep frost-free
 - o Store in original, tightly closed container
 - o Keep separate from acids
 - Specific end use:
 - o Foliar fertilizer and soil improver for professional agriculture and horticulture
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8. Exposure controls / personal protection
- Exposure limits:
No legal limits established for the mixture; follow general guidelines for components
 - Personal protective equipment (PPE):
 - o Eye protection: Safety goggles according to EN 166
 - o Hand protection: Nitrile gloves according to EN 374
 - o Respiratory protection: Not required under normal use. If aerosol is formed: P2 filter
 - o Skin protection: Suitable work clothing
 - Hygiene measures:
 - o Wash hands after use
 - o Remove and clean contaminated clothing immediately
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9. Physical and chemical properties

Property	Value
Physical state	Liquid
Color	Clear to light blue
Odor	Neutral
pH	±1.5
Density	Approx. 1.2 g/cm ³
Solubility	Fully miscible with water
Flash point	Non-flammable
Explosion limits	Not applicable
Oxidizing properties	None

10. Stability and reactivity

- Chemical stability:
Stable under normal storage and use conditions
- Conditions to avoid:
 - o Heat
 - o Direct sunlight

- o Contact with acids and oxidizing agents
 - Hazardous reactions:
 - o Reacts with acids forming heat and gases
 - Hazardous decomposition products:
 - o Sulfur oxides (SO_x)
 - o Metal oxides
 - o Silicon fumes
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11. Toxicological information

- Acute toxicity (H302):
Harmful if swallowed; may cause gastrointestinal symptoms
 - Skin corrosion/irritation (H315):
Irritating to the skin
 - Serious eye damage/eye irritation (H318):
Causes serious eye damage
 - Sensitization:
No sensitizing effects known
 - Chronic effects:
No known data on carcinogenicity, mutagenicity, or reproductive toxicity
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12. Ecological information

- Aquatic toxicity:
Harmful to aquatic life with long-lasting effects
 - Mobility in soil:
Water-soluble; may leach into soil and surface water
 - Persistence and degradability:
Contains biodegradable components (PEG-400); metals remain present
 - Bioaccumulative potential:
Low for most components; metals may accumulate in sediment
 - Results of PBT and vPvB assessment:
Mixture not classified as PBT or vPvB
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13. Disposal considerations

- Product waste disposal: Dispose of residues as hazardous waste via certified collection point per local regulations
 - Packaging: Rinse empty containers thoroughly and dispose of via authorized waste handler
Possible EWC code: 06 10 02* (waste from fertilizers)
 - Additional information: Do not discharge into sewer or environment
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14. Transport information

Transport class	Information
ADR/RID	Not classified as dangerous
IMDG	Not applicable
IATA	Not classified
UN number	Not applicable
Shipping name	Not applicable
Packaging group	Not applicable
Environmental risks	None under transport criteria
Special precautions	None required

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15. Regulatory information

• REACH (EC 1907/2006):

Mixture exempt from registration; components listed in section 3 are REACH registered.

• CLP (EC 1272/2008):

Classified based on components (H302, H315, H318)

• Label elements (CLP):

o Signal word: Danger

o Hazard pictograms:



GHS05

o Hazard statements:

♣ H302: Harmful if swallowed

♣ H315: Causes skin irritation

♣ H318: Causes serious eye damage

o Precautionary statements:

♣ P280, P305+P351+P338, P301+P312, P310

• Seveso Directive (EU): Not applicable

• Other legislation:

Compliant with fertilizer legislation for agricultural use

16. Other information

• Sources of data:

Safety data sheets of raw materials, REACH dossiers, CLP regulation

• Training:

For professional users only with basic knowledge of handling fertilizers

• Full H-statements:

o H302: Harmful if swallowed

o H315: Causes skin irritation

o H318: Causes serious eye damage

- Abbreviations and explanations:
 - o PBT: Persistent, Bioaccumulative, Toxic
 - o vPvB: very Persistent, very Bioaccumulative
 - o CAS: Chemical Abstracts Service
 - o EWC: European Waste Catalogue
 - o PPE: Personal Protective Equipment
 - o REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
 - o CLP: Classification, Labelling and Packaging
 - Revision date: First version – 22 July 2025
 - Reason for revision: Initial release
 - Disclaimer: Information compiled to the best of our knowledge. The user is responsible for correct application.
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17. Transport documentation information

- Not applicable — product is not classified under ADR/IATA/IMDG
 - No hazard class required on transport documents
 - Listing as fertilizer or agricultural product permitted
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18. Packaging information

- Primary packaging: HDPE or plastic can
 - Volume sizes: 1 L, 5 L, 10 L, 20 L, 1000 L
 - Labeling: in accordance with CLP + agricultural labeling as per national legislation
 - Cap: childproof cap not required (not a consumer product)
 - Security: must be sealed, store frost-free
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19. Physicochemical compatibility

- Compatible with:
 - o Water
 - o Other liquid fertilizers (if pH-compatible)
 - Do not mix with:
 - o Acids
 - o Strong oxidizing agents
 - o Aluminum/zinc tanks
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20. Customs/export information

- HS code: 3105.90 (Fertilizers – other)
 - Country of origin: Spain
 - Customs document: CE-compliant agricultural fertilizer
 - REACH status: Not applicable to mixture; all components are registered
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21. Application information

- Use:
 - o Foliar fertilizer and soil improver
 - o To be applied via boom sprayer, drip irrigation, or direct foliar spraying
 - o Dosage depends on crop and application (see label advice)

22. Legal status by region

Region	Status
EU	Agricultural fertilizer
NL	Authorized for professional use
DE, FR, ES	Released under EU fertilizer regulation
Export outside EU –	

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23. Shelf life information

- Shelf life: Minimum 2 years if stored frost-free
- Batch number: Indicated on packaging
- Production date: See packaging or certificate

24. Certification

- Product manufactured in accordance with:
 - o EU 2020/878 (REACH Annex II)
 - o Internal quality control procedure (ISO level where applicable)

25. Storage information for customer

- Store between 5–25°C
- Keep out of direct sunlight
- Do not store in metal containers
- Keep safety pictograms visible

26. Contact point for technical questions

- Name: Technical Department – Kroon De Jager S.L.
- Email: info@kroondejager.com
- Languages: Dutch, English, Spanish
- Availability: Mon–Fri 09:00–17:00 Emergency number: +34 934 18 35 30