SECTION 1: IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING.

1.1 Product identifier.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product Name</td>
<td>Copper Carbonate</td>
</tr>
<tr>
<td>Chemical Name</td>
<td>Copper Carbonate</td>
</tr>
<tr>
<td>CAS No</td>
<td>12069-69-1</td>
</tr>
<tr>
<td>EC No</td>
<td>235-113-6</td>
</tr>
<tr>
<td>Registration No</td>
<td>01-2119513711-50-XXXX</td>
</tr>
</tbody>
</table>

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

Industrial use

Uses advised against:

Uses other than those recommended.

1.3 Details of the supplier of the safety data sheet.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company</td>
<td>ALDEBARÁN SISTEMAS SL</td>
</tr>
<tr>
<td>Address</td>
<td>C/Jerónimo Zurita, 10, entlo izda, 50001</td>
</tr>
<tr>
<td>City</td>
<td>Zaragoza</td>
</tr>
<tr>
<td>Province</td>
<td>Zaragoza</td>
</tr>
<tr>
<td>Telephone</td>
<td>0034976796134</td>
</tr>
<tr>
<td>E-mail</td>
<td><a href="mailto:aldebaran@aldebaransistemas.com">aldebaran@aldebaransistemas.com</a></td>
</tr>
</tbody>
</table>

1.4 Emergency telephone number: 0034915620420 (Available 24 hours)

SECTION 2: HAZARDS IDENTIFICATION.

2.1 Classification of the substance.

In accordance with Regulation (EU) No 1272/2008:

- Acute Tox. 4 : Harmful if inhaled.
- Eye Irrit. 2 : Causes serious eye irritation.
- Skin Irrit. 2 : Causes skin irritation.

2.2 Label elements.

Labelling in accordance with Regulation (EU) No 1272/2008:

Pictograms:

![Pictogram]

Signal Word: Warning

H statements:
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H332: Harmful if inhaled.

P statements:
Copper Carbonate

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS.

3.1 Substances.
Chemical Name: Copper Carbonate
CAS No: 12069-69-1
EC No: 235-113-6
Registration No: 01-2119513711-50-XXXX

3.2 Mixtures.
Not Applicable.

SECTION 4: FIRST AID MEASURES.

IRRITANT PREPARATION. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

4.1 Description of first aid measures.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

Inhalation.
Take the victim into open air; keep them warm and calm. If breathing is irregular or stops, perform artificial respiration. Do not administer anything orally. If unconscious, place them in a suitable position and seek medical assistance.

Eye contact.
If wearing contact lenses, remove them. Wash eyes with plenty of clean and cool water for at least 10 minutes while pulling eyelids up, and seek medical assistance.

Skin contact.
Remove contaminated clothing. Wash skin vigorously with water and soap or a suitable skin cleaner. NEVER use solvents or thinners.

Ingestion.
If accidentally ingested, seek immediate medical attention. Keep calm. NEVER induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed.
Irritant Product, repeated or prolonged contact with skin or mucous membranes can cause redness, blisters or dermatitis, inhalation of spray mist or particles in suspension may cause irritation of the respiratory tract, some symptoms may not be immediate. Can cause allergic reactions.
Harmful Product, prolonged exposure due to inhalation may cause anaesthetic effects and the need for immediate medical assistance.

Contains:
Copper Carbonate

2.3 Other hazards.
In normal use conditions and in its original form, the product itself does not involve any other risk for health and the environment.
4.3 Indication of any immediate medical attention and special treatment needed.
In case of doubt or when symptoms of feeling unwell persist, get medical attention. Never administer anything orally to persons who are unconscious.

SECTION 5: FIREFIGHTING MEASURES.

The product does not present any particular risk in case of fire.

5.1 Extinguishing media.
Recommended extinguishing methods.
Extinguisher powder or CO₂. In case of more serious fires, also alcohol-resistant foam and water spray. Do not use a direct stream of water to extinguish.

5.2 Special hazards arising from the substance.
Special risks.
Fire can cause thick, black smoke. As a result of thermal decomposition, dangerous products can form: carbon monoxide, carbon dioxide. Exposure to combustion or decomposition products can be harmful to your health.

5.3 Advice for firefighters.
Use water to cool tanks, cisterns, or containers close to the heat source or fire. Take wind direction into account. Prevent the products used to fight the fire from going into drains, sewers, or waterways.
Fire protection equipment.
According to the size of the fire, it may be necessary to use protective suits against the heat, individual breathing equipment, gloves, protective goggles or facemasks, and gloves.

SECTION 6: ACCIDENTAL RELEASE MEASURES.

6.1 Personal precautions, protective equipment and emergency procedures.
For exposure control and individual protection measures, see section 8.
Remove all sources of ignition (cigarette, fire, sparks, ...) or heat in the area where the spillage is. In case the product is solid, if there are no contraindications avoid the formation of powder sprayed the product with water. In case of dust dissolved in the area or vapor, provide respiratory protection. If there is no danger, stop the leak. Do not handle the contents of damaged containers or spilled product without respiratory protection. As regards the relative risk information for the environment and health, respiratory protection, ventilation and personal protective equipment, refer to other sections of this safety data sheet. These indications are valid for professionals as well as for emergency situations.

6.2 Environmental precautions.
Dangerous for the environment. in the case of large spills or if the product contaminates lakes, rivers or sewers. inform the appropriate authorities in accordance with local legislation. Prevent the contamination of drains, surface or subterranean waters, and the ground.

6.3 Methods and material for containment and cleaning up.
Absorb spilled material with inert absorbent materials (sand, vermiculite, diatomaceous earth, kieselguhr, etc.) Collect most of the remainder and deposit into a container for disposal. Remove residue with water spray if there are no contraindications. Provide sufficient ventilation at the site of the waste. The disposal of the contaminated material must be carried out in accordance with the provisions of item 13.

6.4 Reference to other sections.
For exposure control and individual protection measures, see section 8.
For later elimination of waste, follow the recommendations under section 13.

-Continued on next page.-
SAFETY DATA SHEET
(in accordance with Regulation (EU) 2015/830)

Copper Carbonate

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for safe handling.
For personal protection, see section 8. Never use pressure to empty the containers. They are not pressure-resistant containers. In the application area, smoking, eating, and drinking must be prohibited. Follow legislation on occupational health and safety. Keep the product in containers made of a material identical to the original.

7.2 Conditions for safe storage, including any incompatibilities.
Store according to local legislation. Observe indications on the label. Store the containers between 5 and 35º C, in a dry and well-ventilated place, far from sources of heat and direct solar light. Keep far away from ignition points. Keep away from oxidising agents and from highly acidic or alkaline materials. Do not smoke. Prevent the entry of non-authorised persons. Once the containers are open, they must be carefully closed and placed vertically to prevent spills.

The product is not affected by Directive 2012/18/EU (SEVESO III).

7.3 Specific end use(s).
Not available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control parameters.
The product does NOT contain substances with Professional Exposure Environmental Limit Values. The product does NOT contain substances with Biological Limit Values.

8.2 Exposure controls.

Measures of a technical nature:
Provide adequate ventilation, which can be achieved by using good local exhaust-ventilation and a good general exhaust system.

<table>
<thead>
<tr>
<th>Concentration:</th>
<th>100 %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses:</td>
<td>Industrial use</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Breathing protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE:</td>
</tr>
<tr>
<td>Characteristics:</td>
</tr>
<tr>
<td>«CE» marking, category III. Made of filtering material, it covers nose, mouth and chin.</td>
</tr>
<tr>
<td>CEN standards:</td>
</tr>
<tr>
<td>EN 149</td>
</tr>
<tr>
<td>Maintenance:</td>
</tr>
<tr>
<td>Check for any tears, defects, etc. before use. Since it is disposable individual protection equipment, it should be replaced after use.</td>
</tr>
<tr>
<td>Observations:</td>
</tr>
<tr>
<td>Does not protect worker unless properly adjusted. Follow the manufacturer's instructions regarding suitable use of the equipment.</td>
</tr>
<tr>
<td>Filter Type needed:</td>
</tr>
<tr>
<td>P2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hand protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE:</td>
</tr>
<tr>
<td>Characteristics:</td>
</tr>
<tr>
<td>«CE» marking, category I.</td>
</tr>
<tr>
<td>CEN standards:</td>
</tr>
<tr>
<td>EN 374-1, EN 374-2, EN 374-3, EN 420</td>
</tr>
<tr>
<td>Maintenance:</td>
</tr>
<tr>
<td>Keep in a dry place, away from any sources of heat, and avoid exposure to sunlight as much as possible. Do not make any changes to the gloves that may alter their resistance, or apply paints, solvents or adhesives.</td>
</tr>
<tr>
<td>Observations:</td>
</tr>
<tr>
<td>Gloves should be of the appropriate size and fit the user's hand well, not being too loose or too tight. Always use with clean, dry hands.</td>
</tr>
<tr>
<td>Material:</td>
</tr>
<tr>
<td>PVC (polyvinyl chloride)</td>
</tr>
<tr>
<td>Breakthrough time (min.):</td>
</tr>
<tr>
<td>&gt; 480</td>
</tr>
<tr>
<td>Material thickness (mm):</td>
</tr>
<tr>
<td>0,35</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Eye protection:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPE:</td>
</tr>
<tr>
<td>Characteristics:</td>
</tr>
<tr>
<td>«CE» marking, category II. Eye protector against dust and smoke.</td>
</tr>
</tbody>
</table>

-Continued on next page.-
Copper Carbonate

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

9.1 Information on basic physical and chemical properties.
Appearance: Powder
Colour: Green
Odour: Odourless
Odour threshold: N.A./N.A.
pH: 5.8-6.1
Melting point: N.A./N.A.
Boiling Point: N.A./N.A.
Flash point: N.A./N.A.
Evaporation rate: N.A./N.A.
Inflammability (solid, gas): N.A./N.A.
Lower Explosive Limit: N.A./N.A.
Upper Explosive Limit: N.A./N.A.
Vapour pressure: N.A./N.A.
Vapour density: N.A./N.A.
Relative density: <4 g/cm³
Solubility: N.A./N.A.
Liposolubility: N.A./N.A.
Hydrosolubility: 0.1-100 mg/l
Partition coefficient (n-octanol/water): N.A./N.A.
Auto-ignition temperature: N.A./N.A.
Decomposition temperature: >200ºC
Viscosity: N.A./N.A.
Explosive properties: N.A./N.A.
Oxidizing properties: N.A./N.A.
N.A./N.A. = Not Available/Not Applicable due to the nature of the product

9.2 Other information.
Pour point: N.A./N.A.
Blink: N.A./N.A.
Kinematic viscosity: N.A./N.A.
N.A./N.A. = Not Available/Not Applicable due to the nature of the product

**SECTION 10: STABILITY AND REACTIVITY.**

10.1 Reactivity.
The product does not present hazards by their reactivity.

10.2 Chemical stability.
Unstable in contact with:
- Bases.

10.3 Possibility of hazardous reactions.
Neutralization can occur on contact with bases.

10.4 Conditions to avoid.
- Avoid contact with bases.

10.5 Incompatible materials.
Avoid the following materials:
- Bases.

10.6 Hazardous decomposition products.
Depending on conditions of use, can be generated the following products:
- Corrosive vapors or gases.

**SECTION 11: TOXICOLOGICAL INFORMATION.**

IRRITANT PREPARATION. Splatters in the eyes can cause irritation.
IRRITANT PREPARATION. Its repeated or prolonged contact with the skin or mucous membranes can cause irritant symptoms such as reddening of the skin, blisters, or dermatitis. Some of the symptoms may not be immediate. They can cause allergic reactions on the skin.

11.1 Information on toxicological effects.
Repeated or prolonged contact with the product can cause the elimination of oil from the skin, giving rise to non-allergic contact dermatitis and absorption of the product through the skin.
Splatters in the eyes can cause irritation and reversible damage.

**Toxicological information.**

<table>
<thead>
<tr>
<th>Name</th>
<th>Acute toxicity Type</th>
<th>Test Kind</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper Carbonate</td>
<td>Oral DL50 Oral Rat</td>
<td></td>
<td>1350 mg/kg [1]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[1] Behavior: Somnolence, normocritic anemia</td>
<td></td>
</tr>
<tr>
<td>CAS No: 12069-69-1</td>
<td>Dermal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EC No: 235-113-6</td>
<td>Inhalation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) acute toxicity;
Product classified:
Acute toxicity (Inhalation), Category 4: Harmful if inhaled.

b) skin corrosion/irritation;
Product classified:
Skin irritant, Category 2: Causes skin irritation.
c) serious eye damage/irritation;
   Product classified:
   Eye irritation, Category 2: Causes serious eye irritation.

d) respiratory or skin sensitisation;
   Not conclusive data for classification.

e) germ cell mutagenicity;
   Not conclusive data for classification.

f) carcinogenicity;
   Not conclusive data for classification.

g) reproductive toxicity;
   Not conclusive data for classification.

h) STOT-single exposure;
   Not conclusive data for classification.

i) STOT-repeated exposure;
   Not conclusive data for classification.

j) aspiration hazard;
   Not conclusive data for classification.

SECTION 12: ECOLOGICAL INFORMATION.

12.1 Toxicity.
No information is available regarding the ecotoxicity.

12.2 Persistence and degradability.
No information is available about persistence and degradability of the product.

12.3 Bioaccumulative potential.
No information is available regarding the bioaccumulation.

12.4 Mobility in soil.
No information is available about the mobility in soil.
The product must not be allowed to go into sewers or waterways.
Prevent penetration into the ground.

12.5 Results of PBT and vPvB assessment.
No information is available about the results of PBT and vPvB assessment of the product.

12.6 Other adverse effects.
No information is available about other adverse effects for the environment.

SECTION 13 DISPOSAL CONSIDERATIONS.

13.1 Waste treatment methods.
Do not dump into sewers or waterways. Waste and empty containers must be handled and eliminated according to current, local/national legislation.
SECTION 14: TRANSPORT INFORMATION.

Transportation is not dangerous. In case of road accident causing the product’s spillage, proceed in accordance with point 6.

14.1 UN number.
Transportation is not dangerous.

14.2 UN proper shipping name.
Description:
ADR: Transportation is not dangerous.
IMDG: Transportation is not dangerous.
ICAO: Transportation is not dangerous.

14.3 Transport hazard class(es).
Transportation is not dangerous.

14.4 Packing group.
Transportation is not dangerous.

14.5 Environmental hazards.
Transportation is not dangerous.

14.6 Special precautions for user.
Transportation is not dangerous.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code.
Transportation is not dangerous.

SECTION 15: REGULATORY INFORMATION.

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

The product is not affected by Directive 2012/18/EU (SEVESO III).
The product is not affected by Regulation (EU) No 528/2012 concerning the making available on the market and use of biocidal products.
The product is not affected by the procedure established Regulation (EU) No 649/2012, concerning the export and import of dangerous chemicals.

15.2 Chemical safety assessment.
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: OTHER INFORMATION.

Classification codes:
Acute Tox. 4 : Acute toxicity (Inhalation), Category 4
Eye Irrit. 2 : Eye irritation, Category 2
Skin Irrit. 2 : Skin irritant, Category 2
Sections changed compared with the previous version:

7

It is advisable to carry out basic training with regard to health and safety at work in order to handle this product correctly.

Abbreviations and acronyms used:
CEN: European Committee for Standardization.
PPE: Personal protection equipment.

Key literature references and sources for data:
http://eur-lex.europa.eu/homepage.html
http://echa.europa.eu/


The information in this Safety Data Sheet on the Preparation is based on current knowledge and on current EC and national laws, as far as the working conditions of the users is beyond our knowledge and control. The product must not be used for purposes other than those that are specified without first having written instructions on how to handle. It is always the responsibility of the user to take the appropriate measures in order to comply with the requirements established by current legislation. The information contained in this Safety Sheet only states a description of the safety requirements for the preparation, and it must not be considered as a guarantee of its properties.