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

1.1. Product identifier
- Product form: Mixture
- Trade name: ECO SMART™ Boric Acid Free Flux - Paste

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
- Use of the substance/mixture: Fluxing agent

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Harris Euro S.L.
Arq. Ricard Giralt s/n Nave F 6
17600 Figueres - España
T +34 972 67 88 26 - F +34 972 50 51 43
ventas@harriseuro.com

1.4. Emergency telephone number
- Emergency number: +1 216 383 8962
  - 24 h
  - 365 days

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
- Acute Tox. 4 (Oral) H302
- Repr. 2 H361

Full text of hazard classes and H-statements: see section 16

Adverse physicochemical, human health and environmental effects
Suspected of damaging fertility or the unborn child. Harmful if swallowed.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
- Hazard pictograms (CLP):
  - GHS07
  - GHS08

- Signal word (CLP): Warning
- Hazardous ingredients: Potassium difluorodihydroxyborate(1-)
- Hazard statements (CLP):
  - H302 - Harmful if swallowed
  - H361 - Suspected of damaging the unborn child (if swallowed)
- Precautionary statements (CLP):
  - P201 - Obtain special instructions before use
  - P202 - Do not handle until all safety precautions have been read and understood
  - P280 - Wear eye protection, face protection, protective gloves, protective clothing
  - P301+P312 - IF SWALLOWED: Call a POISON CENTER if you feel unwell
  - P308+P313 - IF exposed or concerned: Get medical advice/attention
  - P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards
PBT: not yet assessed
vPvB: not yet assessed
ECO SMART™ Boric Acid Free Flux - Paste
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium difluorodihydroxyborate(1-)</td>
<td>(CAS No) 85392-66-1 (EC no) 286-925-2</td>
<td>&gt; 50</td>
<td>Acute Tox. 4 (Oral), H302 Repr. 2, H361</td>
</tr>
</tbody>
</table>

Specific concentration limits:

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>Specific concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium difluorodihydroxyborate(1-)</td>
<td>(CAS No) 85392-66-1 (EC no) 286-925-2</td>
<td>(C &gt;= 7.1) Repr. 2, H361d</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general: IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water. Take off contaminated clothing. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion: Do not induce vomiting. Rinse mouth. Call a poison center or a doctor if you feel unwell.

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

Symptoms/injuries: May impair fertility.
Symptoms/injuries after ingestion: Harmful if swallowed.

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

Treat symptomatically. Keep victim warm and rested. Prolonged medical observation may be indicated. In case of skin contact, wearing rubber gloves rub 2.5% calcium gluconate gel continuously into the affected area for 1.5 hours or until further medical care is available.

SECTION 5: Firefighting measures

5.1. Extinguishing media


5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire: Toxic fumes may be released. Hydrogen fluoride.

5.3. Advice for firefighters

Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate spillage area.

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".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

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.
**SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes.

Hygiene measures: Wash contaminated clothing before reuse. 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

Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool.

### 7.3. Specific end use(s)

No additional information available

**SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

No additional information available

### 8.2. Exposure controls

**Appropriate engineering controls:**

Ensure good ventilation of the work station.

**Personal protective equipment:**

Avoid all unnecessary exposure.

**Hand protection:**

Protective gloves. UNE-EN 374:2004

**Eye protection:**

Safety glasses. EN 166:2001

**Skin and body protection:**

Wear suitable protective clothing

**Respiratory protection:**

Wear respiratory protection

**Environmental exposure controls:**

Avoid release to the environment.

**SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Paste.</td>
</tr>
<tr>
<td>Colour</td>
<td>Green-brown.</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
ECO SMART™ Boric Acid Free Flux - Paste
Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)

Vapour Pressure 20°C: No data available
Vapour density: No data available
Relative density: No data available
Solubility: soluble in water.
Log Pow: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available
Explosive properties: No data available
Oxidising properties: No data available
Explosive limits: No data available

9.2. Other information
No additional information available

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

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

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity:
- Oral: Harmful if swallowed.

ATE CLP (oral): 500.05 mg/kg bodyweight

Skin corrosion/irritation: Not classified
Serious eye damage/irritation: Not classified
Respiratory or skin sensitisation: Not classified
Germ cell mutagenicity: Not classified
Carcinogenicity: Not classified
Reproductive toxicity: Suspected of damaging the unborn child (if swallowed).
Specific target organ toxicity (single exposure): Not classified
Specific target organ toxicity (repeated exposure): Not classified
Aspiration hazard: Not classified

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.

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative potential
No additional information available

12.4. Mobility in soil
No additional information available
12.5. Results of PBT and vPvB assessment
ECO SMART™ Boric Acid Free Flux - Paste

PBT: not yet assessed
vPvB: not yet assessed

12.6. 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.

SECTION 14: Transport information
In accordance with ADR / RID / IMDG / IATA / ADN

<table>
<thead>
<tr>
<th>ADR</th>
<th>UN number</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
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</thead>
<tbody>
<tr>
<td>14.1</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Dangerous for the environment : No</td>
<td>Dangerous for the environment : No</td>
<td>Dangerous for the environment : No</td>
<td>Dangerous for the environment : No</td>
<td>Dangerous for the environment : No</td>
</tr>
</tbody>
</table>

No supplementary information available

14.6. Special precautions for user
- Overland transport
No data available

- Transport by sea
No data available

- Air transport
No data available

- Inland waterway transport
No data available

- Rail transport
No data available

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
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

15.1.2. National regulations
No additional information available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out
**SECTION 16: Other information**

Indication of changes:
Emergency number.

Abbreviations and acronyms:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Acronym</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
<tr>
<td>LD50</td>
<td>Median lethal dose</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>ADN</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
</tbody>
</table>

Full text of H- and EUH-statements:

| Acute Tox. 4 (Oral) | Acute toxicity (oral), Category 4 |
| Repr. 2            | Reproductive toxicity, Category 2 |
| H302               | Harmful if swallowed |
| H361               | Suspected of damaging fertility or the unborn child |

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

| Acute Tox. 4 (Oral) | H302            | Calculation method |
| Repr. 2            | H361            | Calculation method |

**SDS EU (REACH Annex II)**

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 therefore be construed as guaranteeing any specific property of the product.