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

1.1. Product identifier
RAVAMID A GFxx BLACK

Further trade names
xx=% Filler

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

Use of the substance/mixture
Manufacturing of plastic articles and goods including compounding and conversion, eventually recycling.

1.3. Details of the supplier of the safety data sheet

Company name: Ravago Distribution Center NV
Street: Moerenstraat 85 A
Place: B 2370 Arendonk
Telephone: +32 (0) 14672511 Telex: +32 (0) 14672012
e-mail: sdsinfo@ravago.com
Internet: www.ravago.com

1.4. Emergency telephone number
+32(0)14672511

Further Information
Type of use: Injection moulding. blow moulding. Extrusion. Compression moulding.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008
This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

2.3. Other hazards
The hazards of this product are mainly associated with its processing
See section 11 for more detailed information on health effects and symptoms

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization
Glass fibre reinforced thermoplastic pellets (PA)

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC No</td>
<td>Index No</td>
<td>REACH No</td>
</tr>
<tr>
<td>65997-17-3</td>
<td>Glass fiber, not respirable</td>
<td>10-50 %</td>
</tr>
<tr>
<td>266-046-0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
First aider: Pay attention to self-protection!
Provide adequate ventilation.

After inhalation
Provide adequate ventilation.
In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.
Consult physician.

After contact with skin
The melted product can cause severe burns.
Do not use force or solvents to remove product incrustations from affected skin areas.
After contact with molten product, cool skin area rapidly with cold water.
Consult physician.

After contact with eyes
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

After ingestion
No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator.
Do NOT induce vomiting.
Consult physician.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media

5.2. Special hazards arising from the substance or mixture

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus. Protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
High slip hazard because of leaking or spilled product. (Granulate)

6.2. Environmental precautions
No special environmental protection measures are necessary.

6.3. Methods and material for containment and cleaning up
Take up mechanically. Treat the recovered material as prescribed in the section on waste disposal. Do not empty into drains.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Provide adequate ventilation. Equipment with built-in suction provisions.

7.2. Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels
Keep in a cool place.
Provide adequate ventilation.

Advice on storage compatibility
storage stability:
storage temperature: < 40 °C unlimited durability.
No special precautionary measures are necessary.
SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>1333-86-4</td>
<td>Carbon black</td>
<td>-</td>
<td>3.5</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>7</td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
5mg/m³ (breathable dust) is the recommended limit value.

Protective and hygiene measures
Provide adequate ventilation. Equipment with built-in suction provisions.
When using do not eat, drink or smoke. Do not breathe dust.

Eye/face protection
Wear eye/face protection.

Hand protection
Wear suitable gloves.

Skin protection
Only wear fitting, comfortable and clean protective clothing.

Respiratory protection
Respiratory protection necessary at: In the case of the formation of dust. (half-mask with filter (DIN EN 149)).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid (Granulate)
Colour: black
Odour: odourless

Test method

Changes in the physical state
Melting point: 200 - 265 °C
Flash point: not applicable

Explosive properties
In the case of the formation of dust. Dust explosive.

Oxidizing properties
Not applicable

Vapour pressure: 0.8-1.25 g/cm³
Density: 0.8-1.25 g/cm³
Water solubility: insoluble

9.2. Other information

point of decomposition: > 300 °C
Package density: 600 - 1000 kg/m³

SECTION 10: Stability and reactivity
10.6. Hazardous decomposition products

Further information
No risks worthy of mention.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Further information
When used and handled according to the specifications, this product does not have any harmful effects to human health according to our experience and the information available. Contact the manufacturer in case the material is to be used in special applications such as in contact with food or for hygiene, medical or surgical end-use.

SECTION 12: Ecological information

12.1. Toxicity

Insoluble in: Water.
Ecotoxicological effects: none
Due to the consistency along with the low water solubility of the product, bioavailability is unlikely.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal
Can be burnt together with household waste in compliance with official regulations in contact with approved waste disposal companies and with authorities in charge.
Material recycling possible.
Refer to manufacturer or supplier for information on recovery or recycling.

SECTION 14: Transport information

Land transport (ADR/RID)
14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.
14.3. Transport hazard class(es): none

Inland waterways transport (ADN)
14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.
14.3. Transport hazard class(es): none

Marine transport (IMDG)
14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.
14.3. Transport hazard class(es): none

Air transport (ICAO-TI/IATA-DGR)
14.2. UN proper shipping name: Not a hazardous material with respect to transportation regulations.
14.3. Transport hazard class(es): none

SECTION 15: Regulatory information

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

National regulatory information

SECTION 16: Other information
Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

This safety datasheet should be used in conjunction with technical datasheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose than that for which it was intended. This does not in any way excuse the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfil his obligations regarding the use of hazardous products. This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his responsibility. Furthermore, this safety datasheet is made up based on the legal requirements as set by EC 1272/2008 based on information as is available per July 2017 (date of entry into force). That information that is not yet filled in depends on the input we receive from our suppliers following the time scale as foreseen by EC 1272/2008 and depends solely on the registration of the concerned substances.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)