1. Identification of the substance/preparation and of the company/undertaking

1.1 Identification of the substance or preparation:

Product name: Powercrete PW-A Part B
CAS number: 161278-27-9
EC number: 500-618-5

1.2 Use of the substance/preparation:

Professional use
Hardener
Coating

1.3 Company/undertaking identification:

Berry Plastics BVBA
Nijverheidsstraat 10-11
B-2600 Westerlo
Tel: +32 14 72 25 00
Fax: +32 14 72 25 70
cpe@berryplastics.com

1.4 Emergency telephone:

24h/24h:
+32 14 58 45 45 (BIG)
USA: +1 800 424 93 00
During business hours:
888 767 7200 Berry Plastics Corrosion Protection Group Houston

2. Hazards identification

DSD/DPD
Harmful by inhalation and if swallowed
Causes burns
May cause sensitisation by skin contact
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Other hazards
Combustible

Literature reports: not readily degradable in water

CLP
Acute Tox. 4 Harmful if swallowed. (H302)
Skin Corr. 1B Causes severe skin burns and eye damage. (H314)
Skin Sens. 1 May cause an allergic skin reaction. (H317)
Acute Tox. 4 Harmful if inhaled. (H332)
Aquatic Chronic 3 Harmful to aquatic life with long lasting effects. (H412)

Other hazards
Combustible

Literature reports: not readily degradable in water

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No EINECS/ELINCS</th>
<th>Conc.</th>
<th>Classification according to DSD/DPD</th>
<th>Classification according to CLP</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-tert-octylphenol, m-phenylenebis(methyleneamine) and trimethylhexane-1,6-diamine</td>
<td>161278-27-9 500-618-5</td>
<td>&gt;99%</td>
<td>Xn; R20/22 C; R34 R43 R52-53</td>
<td>Acute Tox. 4; H332 Acute Tox. 4; H302 Skin Corr. 1B; H314 Skin Sens. 1; H317 Aquatic Chronic 3; H412</td>
<td></td>
</tr>
</tbody>
</table>
4. First aid measures

4.1 After inhalation:
- Remove the victim into fresh air
- Respiratory problems: consult a doctor/medical service

4.2 Skin contact:
- Wash immediately with lots of water (15 minutes)/shower
- Remove clothing while washing
- Do not remove clothing if it sticks to the skin
- Cover wounds with sterile bandage
- Consult a doctor/medical service
- If burned surface > 10%: take victim to hospital

4.3 Eye contact:
- Rinse immediately with plenty of water for 15 minutes
- Do not apply neutralizing agents
- Take victim to an ophthalmologist

4.4 After ingestion:
- Rinse mouth with water
- Immediately after ingestion: give lots of water to drink
- Do not induce vomiting
- Do not give activated charcoal
- Immediately consult a doctor/medical service

5. Fire-fighting measures

5.1 Suitable extinguishing media:
- BC powder
- Carbon dioxide
- Sand/earth
- Water spray
- Polyvalent foam

5.2 Unsuitable extinguishing media:
- Solid water jet ineffective as extinguishing medium

5.3 Special exposure hazards:
- Temperature above flashpoint: higher fire/explosion hazard
- On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide)

5.4 Instructions:
- Cool tanks/drumns with water spray/remove them into safety
- Dilute toxic gases with water spray
- Take account of toxic fire-fighting water
- Use water moderately and if possible collect or contain it
- Heat exposure: dilute toxic gas/vapour with water spray

5.5 Special protective equipment for fire-fighters:
- Gloves
- Face-shield
- Corrosion-proof suit
- Large spills/in enclosed spaces: compressed air apparatus
- Large spills/in enclosed spaces: gas-tight suit
- Heat/fire exposure: compressed air/oxygen apparatus

6. Accidental release measures

6.1 Personal precautions:
- See heading 8.2

6.2 Environmental precautions:
- Contain released substance, pump into suitable containers
Plug the leak, cut off the supply
Dam up the liquid spill
Take account of toxic/corrosive precipitation water
Prevent soil and water pollution
Prevent spreading in sewers
See heading 13

6.3 Methods for cleaning up:
Take up liquid spill into absorbent material, e.g.: sand/earth
Scoop absorbed substance into closing containers
Carefully collect the spill/leftovers
Damaged/cooled tanks must be emptied
Clean contaminated surfaces with an excess of water
Take collected spill to manufacturer/competent authority
Wash clothing and equipment after handling

7. Handling and storage

7.1 Handling:
Keep away from naked flames/heat
Finely divided: spark- and explosionproof appliances
Finely divided: keep away from ignition sources/sparks
Observe very strict hygiene - avoid contact
Keep container tightly closed
Do not discharge the waste into the drain

7.2 Storage:
Safe storage requirements:
Store at ambient temperature
Store in a dry area
Keep container in a well-ventilated place
Keep locked up
Provide for a tub to collect spills
Keep only in the original container
Meet the legal requirements
Keep away from:
oxidizing agents

7.3 Specific use(s):
See information supplied by the manufacturer for the identified use(s)

8. Exposure controls/Personal protection

8.1 Exposure limit values:
8.1.1 Occupational exposure:
If limit values are applicable and available these will be listed below.

8.2 Exposure controls:
8.2.1 Occupational exposure controls:
Carry operations in the open/under local exhaust/ventilation or with respiratory protection
Personal protective equipment:
a) Respiratory protection:
High gas/vapour concentration: gas mask with filter type A
b) Hand protection:
Gloves
- butyl rubber
- nitrile rubber
c) Eye protection:
Face shield
d) Skin protection:
Corrosion-proof clothing

8.2.2 Environmental exposure controls:
See headings 6.2, 6.3 and 13
9. Physical and chemical properties

9.1 General information:

<table>
<thead>
<tr>
<th>Physical form</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Light brown to yellow</td>
</tr>
</tbody>
</table>

9.2 Important health, safety and environmental information:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flashpoint</td>
<td>139 °C</td>
</tr>
<tr>
<td>Relative density</td>
<td>25 °C) 1.0</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>&gt;2</td>
</tr>
</tbody>
</table>

9.3 Other information:

10. Stability and reactivity

10.1 Conditions to avoid:

- Possible fire hazard
  - heat sources
- Stability
  - Stable under normal conditions

10.2 Materials to avoid:

- oxidizing agents

10.3 Hazardous decomposition products:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide)

11. Toxicological information

11.1 Acute toxicity:

- **Powercrete PW-A Part B**
  - **LD50 oral (rat)**: 401 - 2000 mg/kg
  - **LD50 dermal (rabbit)**: >2000 mg/kg

11.2 Chronic toxicity:

- Not listed in carcinogenicity class (IARC, EC, TLV, MAK)
- Not listed in mutagenicity class (EC, MAK)
- Not classified as toxic to reproduction (EC)

11.3 Acute effects/symptoms:

- **Inhalation**: EXPOSURE TO HIGH CONCENTRATIONS:
  - Corrosion of the upper respiratory tract

- **Skin contact**: Caustic burns/corrosion of the skin

- **Eye contact**: Corrosion of the eye tissue

- **Ingestion**: Burns to the gastric/intestinal mucosa

11.4 Chronic effects:

- ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
  - Skin rash/inflammation

12. Ecological information

12.1 Ecotoxicity:
Powercrete PW-A Part B

12.2 Mobility:
Solubility in/reaction with water

12.3 Persistence and degradability:
Literature reports: not readily degradable in water

12.4 Bioaccumulative potential:
According to literature, slightly bioaccumulative

12.5 Results of PBT assessment:
Not applicable, based on available data

12.6 Other adverse effects:
Not dangerous for the ozone layer (Council Regulation (EC) no 1005/2009)

13. Disposal considerations

13.1 Provisions relating to waste:
Waste material code (Directive 2008/98/EC, decision 2001/118/EC)
08 01 11*: waste paint and varnish containing organic solvents or other dangerous substances
Depending on branch of industry and production process, also other EURAL codes may be applicable
Hazardous waste according to Directive 2008/98/EC

13.2 Disposal methods:
Remove waste in accordance with local and/or national regulations
Remove to an authorized plant for the destruction, neutralization and elimination of hazardous waste
Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste.
Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals.

13.3 Packaging/Container:
Waste material code packaging (Directive 2008/98/EC)
15 01 10*: packaging containing residues of or contaminated by dangerous substances

14. Transport information

ADR
Proper shipping name: Amines, liquid, corrosive, n.o.s.
Techn./chem. name ADR: paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-nonylphenol, m-phenylenebis(methylamine) and trimethylhexane-1,6-diamine
UN number: 2735
Class: B
Packing group: II
Hazard identification number: 80
Classification code: C7
Labels: B
Environmentally hazardous substance mark: no

RID
Proper shipping name: Amines, liquid, corrosive, n.o.s.
### Powercrete PW-A Part B

<table>
<thead>
<tr>
<th>Techn./chem. name RID</th>
<th>paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-nonylphenol, m-phenylenebis(methylamine) and trimethylhexane-1,6-diamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>2735</td>
</tr>
<tr>
<td>Class</td>
<td>B</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Classification code</td>
<td>C7</td>
</tr>
<tr>
<td>Labels</td>
<td>B</td>
</tr>
<tr>
<td>Environmentally hazardous substance mark</td>
<td>no</td>
</tr>
</tbody>
</table>

#### ADN

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Amines, liquid, corrosive, n.o.s.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techn./chem. name ADN</td>
<td>paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-nonylphenol, m-phenylenebis(methylamine) and trimethylhexane-1,6-diamine</td>
</tr>
<tr>
<td>UN number</td>
<td>2735</td>
</tr>
<tr>
<td>Class</td>
<td>B</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Classification code</td>
<td>C7</td>
</tr>
<tr>
<td>Labels</td>
<td>B</td>
</tr>
<tr>
<td>Environmentally hazardous substance mark</td>
<td>no</td>
</tr>
</tbody>
</table>

#### IMO

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Amines, liquid, corrosive, n.o.s. or polyamines, liquid, corrosive, n.o.s.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techn./chem. name IMO</td>
<td>paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-nonylphenol, m-phenylenebis(methylamine) and trimethylhexane-1,6-diamine</td>
</tr>
<tr>
<td>UN number</td>
<td>2735</td>
</tr>
<tr>
<td>Class</td>
<td>B</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Labels</td>
<td>B</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>-</td>
</tr>
<tr>
<td>Environmentally hazardous substance mark</td>
<td>no</td>
</tr>
</tbody>
</table>

#### ICAO

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Amines, liquid, corrosive, n.o.s.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techn./chem. name ICAO</td>
<td>paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-nonylphenol, m-phenylenebis(methylamine) and trimethylhexane-1,6-diamine</td>
</tr>
<tr>
<td>UN number</td>
<td>2735</td>
</tr>
<tr>
<td>Class</td>
<td>B</td>
</tr>
<tr>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td>Labels</td>
<td>B</td>
</tr>
<tr>
<td>Environmentally hazardous substance mark</td>
<td>no</td>
</tr>
</tbody>
</table>

### 15. Regulatory information

#### 15.1 EU Legislation:

**DSD/DPD**

Not listed in Annex I of directive 67/548/EEC et sequens. Labelling established on the basis of the available data.
Corrosive

Contains: paraformaldehyde, oligomeric reaction products with 4-tert-butylphenol, 4-nonylphenol, m-phenylenebis(methylene) and trimethylhexane-1,6-diamine

R-phrases

20/22 Harmful by inhalation and if swallowed
34 Causes burns
43 May cause sensitisation by skin contact
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

S-phrases

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
36/37/39 Wear suitable protective clothing, gloves, and eye/face protection
45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)
61 Avoid release to the environment. Refer to special instructions/safety data sheets.

CLP

Classification and labelling according to the criteria of Regulation (EC) No 1272/2008 and after evaluation of available test data

Signal word

Dgr Danger

H-statements

H332 Harmful if inhaled.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

P-statements

P280 Wear protective gloves, protective clothing and eye protection/face protection.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P261 Avoid breathing.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

15.2 National provisions:

15.3 Specific community rules:


16. Other information
The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question.

Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult your BIG licence agreement for details.

Users are advised that they may have additional disclosure obligations under other national and local laws. Users are advised to ensure that this information is brought to the attention of all employees, agents, and contractors handling this product. Users of Berry Plastics BVBA products should make their own evaluation to determine the suitability of each such product for the specific application and to establish safe handling and installation procedures. Distributors of this product are advised to forward this document, or the information contained herein, to every purchaser of this product.

Berry Plastics BVBA makes no warranties as to the accuracy or completeness of this information and disclaims any liability in connection with its use. Berry Plastics BVBA obligations shall be only as set forth in Berry Plastics BVBA standard terms and conditions of sale for this product. In no case will Berry Plastics BVBA be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of this product.

(*) = INTERNAL CLASSIFICATION (NFPA)

PBT-substances = persistent, bioaccumulative and toxic substances

DSD  Dangerous Substance Directive  
DPD  Dangerous Preparation Directive  
CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

Full text of any R-phrases referred to under headings 2 and 3:

R20/22 Harmful by inhalation and if swallowed
R34 Causes burns
R43 May cause sensitisation by skin contact
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of any H-statements referred to under headings 2 and 3:

H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H332 Hazardous to aquatic life with long lasting effects.

Full text of any classes referred to under headings 2 and 3:

Acute Tox. Acute toxicity
Aquatic Chronic Hazardous to the aquatic environment - chronic
Skin Corr. Skin corrosion
Skin Sens. Skin sensitization