

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:

- Rinse with water
- Take victim to a doctor if irritation persists

In case of burns:

- Wash immediately with lots of water (15 minutes)/shower
- Remove clothing while washing
- Do not tear off solidified product from the skin
- 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 with water
- Take victim to an ophthalmologist if irritation persists

4.4 After ingestion:

- Rinse mouth with water
- If you feel unwell: consult a doctor/medical service

5. Fire-fighting measures

5.1 Suitable extinguishing media:

- Water spray
- Polyvalent foam
- ABC powder
- Carbon dioxide

5.2 Unsuitable extinguishing media:

- Solid water jet ineffective as extinguishing medium

5.3 Special exposure hazards:

- On burning: release of toxic and corrosive gases/vapours e.g.: nitrous vapours, carbon monoxide/carbon dioxide

5.4 Instructions:

- Dilute toxic gases with water spray

5.5 Special protective equipment for firefighters:

- Heat/fire exposure: self-contained breathing apparatus
- Protective clothing

6. Accidental release measures

6.1 Personal precautions:

See heading 8.2

6.2 Environmental precautions:

- Contain released substance, pump over in suitable containers
- See heading 13

6.3 Methods for cleaning up:

- Solid spill: shovel up
- Wash clothing and equipment after handling

7. Handling and storage

7.1 Handling:

- Observe normal hygiene standards
- Clean contaminated clothing

7.2 Storage:

- Store in a dry area
- Meet the legal requirements
- Keep away from: heat sources, oxidizing agents, acids, bases

| | | |
|-------------------------|---------------------|------|
| Storage temperature | : < 40 | °C |
| Quantity limit | : N.D. | kg |
| Storage life | : N.D. | days |
| Materials for packaging | : | |
| - suitable | : no data available | |
| - to avoid | : no data available | |

7.3 Specific use(s):

- Refer to Berry Plastics product installation instructions

8. Exposure controls/Personal protection

8.1 Exposure limit values:

8.1.1 Occupational exposure:

| | |
|-------------------|--------------|
| TLV-TWA | : not listed |
| TLV-STEL | : not listed |
| TLV-Ceiling | : not listed |
| WEL-LTEL | : not listed |
| WEL-STEL | : not listed |
| TRGS 900 | : not listed |
| MAK | : not listed |
| GWBNI-TGG 8 h | : not listed |
| GWKNI-TGG 15 min. | : not listed |
| Ceiling | : not listed |
| VME-8 h | : not listed |
| VLE-15 min. | : not listed |
| GWBB-8 h | : not listed |
| GWK-15 min. | : not listed |
| Momentary value | : not listed |
| EC | : not listed |
| EC-STEL | : not listed |

8.1.2 Sampling methods:

- No data available

8.2 Exposure controls:

8.2.1 Occupational exposure controls:

- Stop heating immediately if the product blisters, chars or shows other signs of degradation
- Avoid inhaling fumes which may be released
- In case work is not done in the open, ventilate the area thoroughly before resuming work

Personal protective equipment:

a) Respiratory protection:

- On heating: gas mask with filter type A

b) Hand protection:

- Insulated gloves
 Suitable material: Neoprene
 Nitrile rubber
- Breakthrough time: N.D.

c) Eye protection:

- Safety glasses

d) Skin protection:

- Protective clothing
 Suitable material: Neoprene
 Nitrile rubber

8.2.2 Environmental exposure controls: see headings 6.2, 6.3 and 13

9. Physical and chemical properties

9.1 General information:

| | | |
|----------------------|---|-------------------------------------------------------|
| Appearance (at 20°C) | : | Plastic tubing, wrap-around sleeves and moulded parts |
| Odour | : | Almost odourless |
| Colour | : | Variable in colour, depending on the composition |

9.2 Important health, safety and environmental information:

| | | | |
|-----------------------------------------|---|-----------|------------|
| pH value (at %) | : | N.D. | |
| Boiling point/boiling range | : | N.D. | °C |
| Flashpoint/flammability | : | N.D. | °C |
| Explosion limits (explosive properties) | : | N.D. | vol% (°C) |
| Oxidising properties | : | N.D. | |
| Vapour pressure (at 20°C) | : | N.D. | hPa |
| Vapour pressure (at 50°C) | : | N.D. | hPa |
| Relative density (at 20°C) | : | 0.9/1.8 | |
| Water solubility | : | Insoluble | |
| Soluble in | : | N.D. | |
| Relative vapour density | : | N.D. | |
| Viscosity (at °C) | : | N.D. | Pa.s |
| Partition coefficient n-octanol/water | : | N.D. | |
| Evaporation rate | | | |
| ratio to butyl acetate | : | N.D. | |
| ratio to ether | : | N.D. | |

9.3 Other information:

| | | | |
|-----------------------------|---|--------|------------------|
| Melting point/melting range | : | 65/160 | °C |
| Auto-ignition point | : | N.D. | °C |
| Saturation concentration | : | N.D. | g/m ³ |
| Specific conductivity | : | N.D. | pS/m |

10. Stability and reactivity

10.1 Conditions to avoid:

- Stable under normal conditions

10.2 Materials to avoid:

- Keep away from: heat sources, oxidizing agents, acids, bases

10.3 Hazardous decomposition products:

- Thermal decomposition is not significant when products are used in accordance with Berry Plastics product installation instructions
- When processed: release of irritant gases/vapours
- On burning: release of toxic and corrosive gases/vapours e.g.: nitrous vapours, carbon monoxide/carbon dioxide

11. Toxicological information

11.1 Acute toxicity:

| | | |
|---------------------|--------|----------|
| LD50 oral rat | : N.D. | mg/kg |
| LD50 dermal rabbit | : N.D. | mg/kg |
| LD50 dermal rabbit | : N.D. | mg/kg |
| LC50 inhalation rat | : N.D. | mg/l/4 h |
| LC50 inhalation rat | : N.D. | ppm/4 h |

11.2 Chronic toxicity:

| | |
|------------------------|--------------|
| EC carc. cat. | : not listed |
| EC muta. cat. | : not listed |
| EC repr. cat. | : not listed |
| Carcinogenicity (TLV) | : not listed |
| Carcinogenicity (MAC) | : not listed |
| Carcinogenicity (VME) | : not listed |
| Carcinogenicity (GWBB) | : not listed |
| Carcinogenicity (MAK) | : not listed |
| Mutagenicity (MAK) | : not listed |
| Teratogenicity (MAK) | : not listed |
| IARC classification | : not listed |

11.3 Routes of exposure: Inhalation of thermal decomposition products

11.4 Acute effects/symptoms:

AFTER INHALATION

ON OVERHEATING:

- Irritation of the respiratory tract
- Coughing
- Headache
- Dizziness
- Nausea
- Respiratory difficulties

AFTER SKIN CONTACT

IF MELTED:

- Burns

AFTER EYE CONTACT

ON OVERHEATING:

- Slight irritation
- Redness of the eye tissue

11.5 Chronic effects:

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

12. Ecological information**12.1 Ecotoxicity:**

- No data available
- **Effect on waste water purification** : no data available

12.2 Mobility:

- **Volatile organic compounds (VOC):** N.D. %
- Insoluble in water

For other physicochemical properties see heading 9

12.3 Persistence and degradability:

- **biodegradation BOD₅** : N.D. % ThOD
- **water** : N.D.
- **soil** : T ½: N.D. days

12.4 Bioaccumulative potential:

- **log P_{ow}** : N.D.
- **BCF** : N.D.

12.5 Results of PBT assessment:

- Not applicable, on the basis of the available data.

12.6 Other adverse effects:

- **WGK** : N.A.
- **Effect on the ozone layer** : No data available
- **Greenhouse effect** : No data available

13. Disposal considerations**13.1 Provisions relating to waste:**

- Waste material code (75/442/EEC, Council Decision 2001/118/EC, O.J. L47 of 16/2/2001): 08 04 10 (waste adhesives and sealants other than those mentioned in 08 04 09)
- LWCA (the Netherlands): KGA category 03
- Remove waste in accordance with local and/or national regulations

13.2 Disposal methods:

- Remove to an authorized waste treatment plant

13.3 Packaging:

- No data available

14. Transport information

- 14.1 Classification of the substance in compliance with UN Recommendations
 UN-number : -
 CLASS :
 SUB RISKS :
 PACKING GROUP :
- 14.2 ADR (transport by road)
 CLASS : Not subject
 PACKING GROUP :
 CLASSIFICATION CODE :
 DANGER LABEL TANKS :
 DANGER LABEL PACKAGES :
 PROPER SHIPPING NAME :
- 14.3 RID (transport by rail)
 CLASS : Not subject
 PACKING GROUP :
 CLASSIFICATION CODE :
 DANGER LABEL TANKS :
 DANGER LABEL PACKAGES :
 PROPER SHIPPING NAME :
- 14.4 ADNR (transport by inland waterways)
 CLASS : Not subject
 PACKING GROUP :
 CLASSIFICATION CODE :
 DANGER LABEL TANKS :
 DANGER LABEL PACKAGES :
- 14.5 IMDG (maritime transport)
 CLASS : Not subject
 SUB RISKS :
 PACKING GROUP :
 MFAQ :
 EMS :
 MARINE POLLUTANT :
- 14.6 ICAO (air transport)
 CLASS : Not subject
 SUB RISKS :
 PACKING GROUP :
 PACKING INSTRUCTIONS PASSENGER AIRCRAFT :
 PACKING INSTRUCTIONS CARGO AIRCRAFT :
- 14.7 Special precautions : Not restricted for any mode
 of international transport

15. Regulatory information

15.1 EU Legislation:

Not classified as dangerous in compliance with Regulation (EC) No 1907/2006

15.2 National provisions:

the Netherlands:
Waterbezwaarlijkheid: N.A.

Germany:
WGK : N.A.

16. Other information

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.

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N.A. = NOT APPLICABLE
N.D. = NOT DETERMINED
(*) = INTERNAL CLASSIFICATION (NFPA)

PBT-substances = persistent, bioaccumulative and toxic substances

Exposure limits:

TLV : Threshold Limit Value - ACGIH USA
WEL : Workplace Exposure Limits - United Kingdom
TRGS 900 : Technische Regel für Gefahrstoffe 900 (Arbeitsplatzgrenzwerte) - Germany
MAK : Maximale Arbeitsplatzkonzentrationen - Germany
GWBNL : Grenswaarde voor blootstelling - the Netherlands
GWKNL : Grenswaarde korte duur - the Netherlands
VME : Valeurs limites de Moyenne d'Exposition - France
VLE : Valeurs limites d'Exposition à court terme - France
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium
GWK : Grenswaarde kortstondige blootstelling - Belgium
EC : Indicative occupational exposure limit values

I : Inhalable fraction = **T** : Total dust = **E** : Einatembarer Aerosolanteil
R : Respirable fraction = **A** : Alveolengängiger Aerosolanteil/Alveolar dust
C : Ceiling limit

Chronic toxicity:

K : List of the carcinogenic substances and processes - the Netherlands