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

1.1 Product identifier
- Trade name: foodproof® Hazelnut Detection Kit - 5’Nuclease
  - Article number: R 302 62

1.2 Relevant identified uses of the substance or mixture and uses advised against
No further relevant information available.

1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:
  BIOTECON Diagnostics GmbH
  Hermannswerder Haus 17
  14473 Potsdam
  Phone: +49 (0) 331-23 00 200
  www.bc-diagnostics.com

- Informing department:
  Phone: +49 (0) 331-23 00 200
  Fax: +49 (0) 331-23 00 299

1.4 Emergency telephone number:
Phone: +49 (0) 331-23 00 200

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008 Void
  The product is not classified according to the CLP regulation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void
  The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- Classification system:
  The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void

2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures
- Description: PCR Detection kit of isolated DNA from hazelnut.

- Dangerous components:
<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>glycerol</th>
<th>substance with a Community workplace exposure limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5</td>
<td>200-289-5</td>
<td>50-100%</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 2)
SECTION 4: First aid measures

· 4.1 Description of first aid measures
  · General information Remove contaminated clothing.
  · After inhalation Supply fresh air; consult doctor in case of symptoms.
  · After skin contact If skin irritation continues, consult a doctor.
  · After eye contact Call a doctor immediately.
  · After swallowing In case of persistent symptoms consult doctor.

· 4.2 Most important symptoms and effects, both acute and delayed
  No further relevant information available.

· 4.3 Indication of any immediate medical attention and special treatment needed
  No further relevant information available.

SECTION 5: Firefighting measures

· 5.1 Extinguishing media
  · Suitable extinguishing agents
    Extinguishing powder, foam or water jet. Fight larger fires with water jet or alcohol-resistant foam.

· 5.2 Special hazards arising from the substance or mixture
  Formation of toxic gases is possible during heating or in case of fire.

· 5.3 Advice for firefighters
  · Protective equipment: Wear self-contained breathing apparatus.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures
  Not required.

· 6.2 Environmental precautions:
  Do not allow to enter drainage system, surface or ground water.
  Inform respective authorities in case product reaches water or sewage system.

· 6.3 Methods and material for containment and cleaning up:
  Send for recovery or disposal in suitable containers.

· 6.4 Reference to other sections
  See Section 7 for information on safe handling
  See Section 8 for information on personal protection equipment.
  See Section 13 for information on disposal.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling
  Store in cool, dry place in tightly closed containers.
  Keep away from heat and direct sunlight.
  Avoid contact with eyes and skin.
  · Information about protection against explosions and fires: No special measures required.

· 7.2 Conditions for safe storage, including any incompatibilities
  · Storage
    · Requirements to be met by storerooms and containers:
      Store only in the original container.
      Prevent any penetration into the ground.
    · Information about storage in one common storage facility:
      Keep away from strong oxidizing, alkalis and acidic materials.
    · Further information about storage conditions:
      Store in the dark.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters
- Components with limit values that require monitoring at the workplace:
  - OEL: occupational exposure limit
  - WEL: workplace exposure limit

<table>
<thead>
<tr>
<th>Substance</th>
<th>OEL (Great Britain)</th>
<th>WEL (Great Britain)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5 glycerol</td>
<td></td>
<td>10 mg/m³</td>
</tr>
</tbody>
</table>

- DNELs

<table>
<thead>
<tr>
<th>Substance</th>
<th>DNEL (consumer, long-term, systemic)</th>
<th>DNEL (consumer, short-term, local)</th>
<th>DNEL (worker, long-term, local)</th>
</tr>
</thead>
<tbody>
<tr>
<td>56-81-5 glycerol</td>
<td>229 mg/kg bw/day (human)</td>
<td>33 mg/m³ (human)</td>
<td>56 mg/m³ (human)</td>
</tr>
</tbody>
</table>

8.2 Exposure controls
- Personal protective equipment
  - General protective and hygienic measures
    Wash hands during breaks and at the end of the work.
  - Breathing equipment: Not required.
  - Protection of hands:
    Use gloves of stable material (i.e. nitril rubber).
    The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
    Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
    Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - Material of gloves
    The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.
  - Penetration time of glove material
    The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:
    - Nitrile rubber, NBR
  - Eye protection: Not required.
  - Body protection: Wear suitable protective clothing.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
- General Information
  - Form: Fluid
  - Colour: Different according to colour
Trade name: foodproof® Hazelnut Detection Kit - 5'Nuclease

- Odour: odourless
- Odour threshold: Not determined.

- pH-value: Not applicable.

- Change in condition
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: Not determined

- Flash point: Not applicable

- Inflammability (solid, gaseous): Not determined.

- Ignition temperature:
  - Decomposition temperature: Not determined.
  - Self-inflammability: Product is not selfigniting.
  - Danger of explosion: Product is not explosive.

- Critical values for explosion:
  - Lower: Not determined.
  - Upper: Not determined.

- Vapour pressure: Not applicable.

- Density
  - Vapour density: Not determined
  - Evaporation rate: Not applicable.

- Solubility in / Miscibility with
  - Water: Fully miscible

- Partition coefficient (n-octanol/water): Not determined.

- Viscosity:
  - dynamic: Not applicable.
  - kinematic: Not applicable.

- Solvent content:
  - Organic solvents: 0.0 %

- 9.2 Other information: No further relevant information available.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
- 10.2 Chemical stability
  - Thermal decomposition / conditions to be avoided:
    No decomposition if used according to specifications.

- 10.3 Possibility of hazardous reactions:
  No dangerous reactions known

- 10.4 Conditions to avoid:
  No further relevant information available.

- 10.5 Incompatible materials:
  No further relevant information available.

- 10.6 Hazardous decomposition products:
  None in case of intended use and storage in compliance with instructions.
SECTION 11: Toxicological information

· 11.1 Information on toxicological effects
  · Acute toxicity:
    · LD/LC50 values that are relevant for classification:
      56-81-5 glycerol
      | Oral   | LD50  | 27200 mg/kg (rat) |
      | Dermal | LD50  | 56750 mg/kg (guinea pig) |
      | Inhalative | LC50 | > 11 mg/l/1h (rat) |
    · Primary irritant effect:
      · on the skin: No irritant effect.
      · on the eye: Irritant effect.
    · Sensitisation: No sensitizing effect known.

SECTION 12: Ecological information

· 12.1 Toxicity
  · Aquatic toxicity:
    56-81-5 glycerol
    | EC5        | 3200 mg/l/72h (Entosiphon sulcatum) |
    | EC50 (static) | 1955 mg/l/48h (Daphnia magna) |
    | IC5        | > 10000 mg/l/16h (Pseudomonas putida) |
    | LC50 (static) | 54000 mg/l/96h (Oncorhynchus mykiss) |
  · 12.2 Persistence and degradability No further relevant information available.
  · 12.3 Bioaccumulative potential No further relevant information available.
  · 12.4 Mobility in soil No further relevant information available.
  · Additional ecological information:
    · General notes:
      Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.
      Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.
  · 12.5 Results of PBT and vPvB assessment
    · PBT: Not applicable.
    · vPvB: Not applicable.
  · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods
  · Recommendation Smaller quantities can be disposed with household waste.
  · Uncleaned packagings:
    · Recommendation:
      Dispose of packaging according to regulations on the disposal of packagings.
SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, ADN, IMDG, IATA Void

- 14.2 UN proper shipping name
  - ADR, ADN, IMDG, IATA Void

- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA
    - Class Void

- 14.4 Packing group
  - ADR, IMDG, IATA Void

- 14.5 Environmental hazards:
  - Marine pollutant: No

- 14.6 Special precautions for user
  Not applicable.

- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
  Not applicable.

- UN "Model Regulation": -

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Labelling according to Regulation (EC) No 1272/2008 Void
    - Hazard pictograms Void
    - Signal word Void
    - Hazard statements Void
  
  - National regulations
    - Water hazard class: Water hazard class 1 (Self-assessment): slightly hazardous for water.

- Substances of very high concern (SVHC) according to REACH, Article 57
  None of the ingredients is contained.

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing data specification sheet:
  This Material Safety Data Sheet has been drawn up in cooperation with:
  DEKRA Consulting GmbH, Hanomagstr. 12, D-30449 Hanover, Germany,
  tel.: (+49) 511 42079 311, reach@dekra.com.

- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  EINECS: European Inventory of Existing Commercial Chemical Substances
  ELINCS: European List of Notified Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
Trade name: foodproof® Hazelnut Detection Kit - 5'Nuclease

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DNEL</td>
<td>Derived No-Effect Level (REACH)</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal concentration, 50 percent</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal dose, 50 percent</td>
</tr>
</tbody>
</table>

(Contd. from page 6)