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

- **1.1 Product identifier**
  - Trade name: Ultima Gold LLT
  - Article number: 6013377, 6013371, 6013373

- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
  - No further relevant information available.
  - Application of the substance / the mixture Laboratory chemicals

- **1.3 Details of the supplier of the safety data sheet**
  - Manufacturer/Supplier:
    - PerkinElmer Health Sciences B.V.
    - Rigaweg 22
    - 9723 TH Groningen
    - The Netherlands
    - P.O. Box 5205
    - 9700 GE Groningen
    - The Netherlands
    - Phone: 0031 50 5445900
    - Fax: 0031 50 5445950
    - www.perkinelmer.com
  - Further information obtainable from:
    - Quality Assurance, Environment, Safety & Health (QA/ESH)
    - SDS.Groningen@perkinelmer.com

- **1.4 Emergency telephone number:**
  - +31 50 5445971
  - CHEMTREC: +1 703-527-3887

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
  - Classification according to Regulation (EC) No 1272/2008

  - GHS08 health hazard
    - Asp. Tox. 1
    - H304 May be fatal if swallowed and enters airways.

  - GHS05 corrosion
    - Eye Dam. 1
    - H318 Causes serious eye damage.

  - GHS09 environment
    - Aquatic Chronic 1
    - H410 Very toxic to aquatic life with long lasting effects.

  - GHS07
Trade name: Ultima Gold LLT

Skin Irrit. 2     H315 Causes skin irritation.

2.2 Label elements
· Labelling according to Regulation (EC) No 1272/2008
  The product is classified and labelled according to the CLP regulation.
· Hazard pictograms
  GHS05  GHS08  GHS09

· Signal word Danger
· Hazard-determining components of labelling:
  Diisopropyl naphthalene isomers
  Alkylphenol polyglycolether
  Alkyl Polyethylene Glycol Ether
· Hazard statements
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H304 May be fatal if swallowed and enters airways.
  H410 Very toxic to aquatic life with long lasting effects.
· Precautionary statements
  P280 Wear protective gloves/protective clothing/eye protection/face protection.
  P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
  P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P362 Take off contaminated clothing and wash before reuse.
  P332+P313 If skin irritation occurs: Get medical advice/attention.
  P302+P352 IF ON SKIN: Wash with plenty of water.

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: Mixture of substances listed below with nonhazardous additions.
· Dangerous components:
  CAS: 38640-62-9  Diisopropyl naphthalene isomers  40-60%
  EINECS: 254-052-6  Asp. Tox. 1, H304
  Aquatic Chronic 1, H410

(Contd. on page 3)
**Safety data sheet**

according to 1907/2006/EC, Article 31

**Trade name:** Ultima Gold LLT

<table>
<thead>
<tr>
<th>CAS</th>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>9016-45-9</td>
<td>Alkylphenol Polyglycolether</td>
<td>20-40%</td>
</tr>
<tr>
<td>112-34-5</td>
<td>2-(2-butoxyethoxy)ethanol</td>
<td>10-20%</td>
</tr>
<tr>
<td>9016-45-9</td>
<td>Polymer</td>
<td>2.5-10%</td>
</tr>
<tr>
<td>68412-53-3</td>
<td>Nonylphenyl (branched) polyoxyethylene ether phosphate</td>
<td>≤2.5%</td>
</tr>
<tr>
<td>78-66-0</td>
<td>3,6-Dimethyl-4-octyne-3,6-diol</td>
<td>≤2.5%</td>
</tr>
</tbody>
</table>

**Non-dangerous components**

<table>
<thead>
<tr>
<th>CAS</th>
<th>Name</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>92-71-7</td>
<td>2,5-Diphenyloxazole (PPO)</td>
<td>≤2.5%</td>
</tr>
<tr>
<td>13280-61-0</td>
<td>1,4-Bis-(2-methylstyril)-benzene (bis-MSB)</td>
<td>≤2.5%</td>
</tr>
</tbody>
</table>

**Water, distilled, conductivity or of similar purity**

**SECTION 4: First aid measures**

4.1 Description of first aid measures

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** If symptoms persist 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:**
  Use fire extinguishing methods suitable to surrounding conditions.
  CO₂ powder or water spray. Fight larger fires with water spray.

5.2 Special hazards arising from the substance or mixture

No further relevant information available.
5.3 Advice for firefighters

- **Protective equipment**: Wear fully protective suit.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
  
  Keep people at a distance and stay on the windward side.
  
  Ensure adequate ventilation

- **6.2 Environmental precautions**:
  
  Inform respective authorities in case of seepage into water course or sewage system.
  
  Do not allow to enter sewers/surface or ground water.

- **6.3 Methods and material for containment and cleaning up**:
  
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

- **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 disposal information.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
  
  No special measures required.

- **7.2 Conditions for safe storage, including any incompatibilities**

  - **Storage**:
    
    - **Requirements to be met by storerooms and receptacles**: Store in a cool location.
    
    - **Information about storage in one common storage facility**: Not required.
    
    - **Further information about storage conditions**:
      
      Protect from heat and direct sunlight.
      
      Store receptacle in fume cupboard.

- **7.3 Specific end use(s)**
  
  No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities**
  
  No further data; see item 7.

- **8.1 Control parameters**

  - **Ingredients with limit values that require monitoring at the workplace**:

    | CAS Number | Substance | Short-term value | Long-term value |
    |------------|-----------|-----------------|----------------|
    | 112-34-5   | 2-(2-butoxyethoxy)ethanol | 101.2 mg/m³, 15 ppm | 67.5 mg/m³, 10 ppm |

  - **Additional information**: The lists valid during the making were used as basis.

- **8.2 Exposure controls**

  - **Personal protective equipment**:

  - **General protective and hygienic measures**:
    
    Keep away from foodstuffs, beverages and feed.
Trade name: Ultima Gold LLT

Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the skin. Avoid contact with the eyes and skin.

- **Respiratory protection:** Not necessary if room is well-ventilated.
- **Protection of hands:**
  
  ![](https://example.com/glove.png)

  **Protective gloves**

  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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

  - **Eye protection:**

  ![](https://example.com/goggles.png)

  **Tightly sealed goggles**

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**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**

  - **General Information**

    | Appearance: |
    |-------------|
    | Form: Fluid |
    | Colour: Colourless |
    | Odour: Characteristic |

  - **Change in condition**

    | Melting point/Melting range: Undetermined. |
    | Boiling point/Boiling range: 290 °C (554 °F) |

  - **Flash point:** 140 °C (284 °F)

  - **Ignition temperature:** 500 °C (932 °F)

  - **Self-igniting:** Product is not selfigniting.

  - **Danger of explosion:** Product does not present an explosion hazard.
Explosion limits:
- Lower: Not determined.
- Upper: Not determined.

Density at 20 °C (68 °F): 0.98 g/cm³ (8.178 lbs/gal)

Solubility in / Miscibility with water: Not miscible or difficult to mix.

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: Carbon monoxide

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity

LD/LC50 values relevant for classification:
38640-62-9 Diisopropyl naphthalene isomers
- Oral LD50 4000 mg/kg (Rat)

Primary irritant effect:
Skin corrosion/irritation Irritant to skin and mucous membranes.
Serious eye damage/irritation Strong irritant with the danger of severe eye injury.
Respiratory or skin sensitisation No sensitising effects known.

Additional toxicological information:
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

SECTION 12: Ecological information

12.1 Toxicity
Aquatic toxicity:
9016-45-9 Alkylphenol Polyglycolether
- Inhalative EC50/48h 10 mg/l (Daphnia magna (grote watervlo))
- LC50 10 mg/l (andere vissen)

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.

Ecotoxicological effects:
- Remark: Harmful to fish

- Additional ecological information:
  - General notes:
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
    - Harmful to aquatic organisms
  - 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
  Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packaging:
- Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information
- 14.1 UN-Number
  ADR, IMDG, IATA UN3082
- 14.2 UN proper shipping name
  - ADR 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycolether)
  - IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycolether), MARINE POLLUTANT
  - IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycolether)

- 14.3 Transport hazard class(es)
  - ADR
  - Class 9 (M6) Miscellaneous dangerous substances and articles.
Trade name: Ultima Gold LLT

- Label
- IMDG, IATA

- Class
  - Special marking (ADR): Symbol (fish and tree)
  - Special marking (IATA): Symbol (fish and tree)

- 14.4 Packing group
- ADR, IMDG, IATA

- 14.5 Environmental hazards:
  - Marine pollutant: Yes
  - Diisopropyl naphthalene isomers
  - Symbol (fish and tree)

- 14.6 Special precautions for user
  - Danger code (Kemler): 90
  - EMS Number: F-A,S-F

- 14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

- Transport/Additional information:

- ADR
- Tunnel restriction code: E

- UN "Model Regulation":
  - UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycolether), 9, III

SECTION 15: Regulatory information

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

- National regulations:
  - Technical instructions (air):

<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wasser</td>
<td>0-2.5</td>
</tr>
<tr>
<td>NK</td>
<td>10-20</td>
</tr>
</tbody>
</table>

- 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.
SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  H302 Harmful if swallowed.
  H304 May be fatal if swallowed and enters airways.
  H315 Causes skin irritation.
  H318 Causes serious eye damage.
  H319 Causes serious eye irritation.
  H410 Very toxic to aquatic life with long lasting effects.
  H411 Toxic to aquatic life with long lasting effects.
  H412 Harmful to aquatic life with long lasting effects.

- Department issuing MSDS: Quality Assurance, Environment, Safety & Health (QA/ESH)
- Contact: SDS.Groningen@perkinelmer.com
- Abbreviations and acronyms:
  IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
  ICAO: International Civil Aviation Organisation
  ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
  RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
  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)
  LC50: Lethal concentration, 50 percent
  LD50: Lethal dose, 50 percent
  Acute Tox. 4: Acute toxicity, Hazard Category 4
  Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
  Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1
  Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2
  Asp. Tox. 1: Aspiration hazard, Hazard Category 1
  Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1
  Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2
  Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.