

**1 Identification**

- **Product identifier**
- **Trade name:** Ultima Gold Radioactive LSC Standards
- **Product number:**  
6007600A, 6007601A, 6007602A, 6007603A, 6007604A, 6007605A, 6010704A, 6010705A, 6010706A
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Revvity, Inc  
549 Albany Street  
Boston, MA 02118
- **Information department:**  
US Technical Support  
800-762-4000
- **Emergency telephone number:**  
If inside USA, call CHEMTREC at 1-800-424-9300  
If outside USA, call CHEMTREC at 1-703-527-3887

**2 Hazard(s) identification**

- **Classification of the substance or mixture**  
Skin Irritation 2      H315 Causes skin irritation.  
Eye Damage 1      H318 Causes serious eye damage.  
Aspiration Hazard 1      H304 May be fatal if swallowed and enters airways.  
Aquatic Acute 2      H401 Toxic to aquatic life.  
Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.
- **Additional information:** For the wording of the listed H phrases refer to section 16.

- **Label elements**
- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms**



GHS05    GHS08    GHS09

- **Signal word** Danger
- **Hazard-determining components of labeling:**  
2-Ethylhexyl phosphate diethanolamine salt  
Diisopropyl Naphthalene Isomers
- **Hazard statements**  
Causes skin irritation.  
Causes serious eye damage.  
May be fatal if swallowed and enters airways.  
Toxic to aquatic life.  
Very toxic to aquatic life with long lasting effects.
- **Precautionary statements**  
If swallowed: Immediately call a poison center/doctor.  
Specific treatment (see on this label).  
Do NOT induce vomiting.

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*If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*

*Take off contaminated clothing and wash it before reuse.*

*Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 1

Reactivity = 0

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description: Mixture of the substances listed below with nonhazardous additions.**

· **Dangerous components:**

38640-62-9	Diisopropyl Naphthalene Isomers	50-75%
9016-45-9	Renex 678	10-25%
73070-48-1	2-Ethylhexyl phosphate diethanolamine salt	10-25%

### 4 First-aid measures

- **Description of first aid measures**
- **General information: Immediately remove any clothing soiled by the product.**
- **After inhalation: In case of unconsciousness place patient stably in side position for transportation.**
- **After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.**
- **After swallowing: If symptoms persist consult doctor.**
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents: Use fire fighting measures that suit the environment.**
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment: Wear self-contained respiratory protective device.**

### 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.

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- **Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralizing agent.  
Dispose contaminated material as waste according to section 13.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**

38640-62-9	Diisopropyl Naphthalene Isomers	5.6 mg/m <sup>3</sup>
9016-45-9	Renex 678	43 mg/m <sup>3</sup>
92-71-7	2,5-diphenyloxazole	2.5 mg/m <sup>3</sup>
13280-61-0	1,4-bis(4-methyl-alpha-styryl)benzene	12 mg/m <sup>3</sup>
78-40-0	triethyl phosphate	23 mg/m <sup>3</sup>
577-11-7	Sodium dioctyl sulphosuccinate	5.7 mg/m <sup>3</sup>

· **PAC-2:**

38640-62-9	Diisopropyl Naphthalene Isomers	61 mg/m <sup>3</sup>
9016-45-9	Renex 678	470 mg/m <sup>3</sup>
92-71-7	2,5-diphenyloxazole	27 mg/m <sup>3</sup>
13280-61-0	1,4-bis(4-methyl-alpha-styryl)benzene	130 mg/m <sup>3</sup>
78-40-0	triethyl phosphate	250 mg/m <sup>3</sup>
577-11-7	Sodium dioctyl sulphosuccinate	63 mg/m <sup>3</sup>

· **PAC-3:**

38640-62-9	Diisopropyl Naphthalene Isomers	370 mg/m <sup>3</sup>
9016-45-9	Renex 678	5,400 mg/m <sup>3</sup>
92-71-7	2,5-diphenyloxazole	160 mg/m <sup>3</sup>
13280-61-0	1,4-bis(4-methyl-alpha-styryl)benzene	790 mg/m <sup>3</sup>
78-40-0	triethyl phosphate	320 mg/m <sup>3</sup>
577-11-7	Sodium dioctyl sulphosuccinate	380 mg/m <sup>3</sup>

## 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**  
Store in cool, dry place in tightly closed receptacles.  
No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Storage class:** 10
- **Specific end use(s)** No further relevant information available.

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## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from food and beverages.  
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:** Suitable respiratory protective device recommended.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
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.
- **Eye protection:**



Tightly sealed goggles

## 9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

<b>Form:</b>	Fluid
<b>Color:</b>	According to product specification
<b>Odor:</b>	Characteristic
<b>Odor threshold:</b>	Not determined.
- **pH-value:** N/A
- **Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
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<b>Boiling point/Boiling range:</b>	Undetermined.
· <b>Flash point:</b>	260 °C (500 °F)
· <b>Flammability (solid, gaseous):</b>	Not applicable.
· <b>Auto igniting:</b>	383 °C (721.4 °F)
· <b>Decomposition temperature:</b>	Not determined.
· <b>Ignition temperature:</b>	Product is not selfigniting.
· <b>Danger of explosion:</b>	Product does not present an explosion hazard.
· <b>Explosion limits:</b>	
<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.
· <b>Vapor pressure:</b>	Not determined.
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapor density</b>	Not determined.
· <b>Evaporation rate</b>	Not determined.
· <b>Solubility in / Miscibility with Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	0.5 %
<b>VOC content:</b>	0.50 %
· <b>Other information</b>	No further relevant information available.

## 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

## 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**

· <b>LD/LC50 values that are relevant for classification:</b>		
38640-62-9 <i>Diisopropyl Naphthalene Isomers</i>		
Oral	LD50	3,900 mg/kg (rat)

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Dermal	LD50	4,500 mg/kg (rat)
Inhalative	LC50/4 h	5.64 mg/l (rat)

· **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.
- **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

· **Carcinogenic categories**

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

## 12 Ecological information

· **Toxicity**

- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

· **Behavior in environmental systems:**

- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:** N/A

· **Other information:** N/A

· **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

## 13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Must be specially treated adhering to official regulations.

· **Uncleaned packagings:**

- **Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

· **UN-Number**

· **ADR, IMDG, IATA**

UN3082

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<ul style="list-style-type: none"> <li>· <b>UN proper shipping name</b></li> <li>· <b>ADR</b></li> <li>· <b>IMDG</b></li> <li>· <b>IATA</b></li> </ul>	<p>3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl Naphthalene Isomers, Renex 678)</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl Naphthalene Isomers, Renex 678), MARINE POLLUTANT</p> <p>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl Naphthalene Isomers, Renex 678)</p>
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· **Transport hazard class(es)**· **ADR, IMDG, IATA**· **Class**

9 Miscellaneous dangerous substances and articles

· **Label**

9

· **Packing group**· **ADR, IMDG, IATA**

III

· **Environmental hazards:**

Product contains environmentally hazardous substances: Diisopropyl Naphthalene Isomers

· **Marine pollutant:**

Yes (DOT)

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

· **Special precautions for user**

Warning: Miscellaneous dangerous substances and articles

· **Hazard identification number (Kemler code):** 90· **EMS Number:**

F-A,S-F

· **Stowage Category**

A

· **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable.

· **Transport/Additional information:**· **Quantity limitations**

On passenger aircraft/rail: 450 L

On cargo aircraft only: 450 L

· **ADR**· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **IMDG**· **Limited quantities (LQ)**

5L

· **Excepted quantities (EQ)**

Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

· **UN "Model Regulation":**

UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DIISOPROPYL NAPHTHALENE ISOMERS, RENEX 678), 9, III

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## 15 Regulatory information

· **Safety, health and environmental regulations/legislation specific for the substance or mixture**

No further relevant information available.

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

9016-45-9 | Renex 678

· **TSCA (Toxic Substances Control Act):**

38640-62-9	Diisopropyl Naphthalene Isomers	ACTIVE
9016-45-9	Renex 678	ACTIVE
73070-48-1	2-Ethylhexyl phosphate diethanolamine salt	ACTIVE
92-71-7	2,5-diphenyloxazole	ACTIVE
13280-61-0	1,4-bis(4-methyl-alpha-styryl)benzene	ACTIVE
78-40-0	triethyl phosphate	ACTIVE
577-11-7	Sodium dioctyl sulphosuccinate	ACTIVE

· **Hazardous Air Pollutants**

None of the ingredients is listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

Radionuclide

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

The information provided in this safety data sheet is based on our current knowledge, and is believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be regarded as a warranty or specification of quality. All materials may present unknown hazards and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards that exist. Revvity, Inc. cannot be held liable for any damage resulting from handling or contact with the product.

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· **Contact:**

· **Date of preparation / last revision** 03/28/2024

· **Abbreviations and acronyms:**

*ADR: Accord relatif au transport international 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*

*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)*

*NFPA: National Fire Protection Association (USA)*

*VOC: Volatile Organic Compounds (USA, EU)*

*LC50: Lethal concentration, 50 percent*

*LD50: Lethal dose, 50 percent*

*PBT: Persistent, Bioaccumulative and Toxic*

*vPvB: very Persistent and very Bioaccumulative*

*NIOSH: National Institute for Occupational Safety*

*OSHA: Occupational Safety & Health*

*TLV: Threshold Limit Value*

*PEL: Permissible Exposure Limit*

*REL: Recommended Exposure Limit*

*Skin Irritation 2: Skin corrosion/irritation – Category 2*

*Eye Damage 1: Serious eye damage/eye irritation – Category 1*

*Aspiration Hazard 1: Aspiration hazard – Category 1*

*Aquatic Acute 2: Hazardous to the aquatic environment - acute aquatic hazard – Category 2*

*Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1*

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