

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

- **1.1 Product identifier**
- **Trade name:** Ultima Gold Radioactive LSC Standards
- **Product number:**  
6007600A, 6007601A, 6007602A, 6007603A, 6007604A, 6007605A, 6010704A, 6010705A, 6010706A
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Product category** PC21 Laboratory chemicals
- **Application of the substance / the mixture** Laboratory chemicals
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Revvity, Inc  
549 Albany Street  
Boston, MA 02118
- **Further information obtainable from:**  
US Technical Support  
800-762-4000
- **1.4 Emergency telephone number:**  
If inside USA, call CHEMTREC at 1-800-424-9300  
If outside USA, call CHEMTREC at 1-703-527-3887

## SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **2.1.1 Classification according to Regulation (EC) No 1272/2008**  
Skin Irrit. 2      H315 Causes skin irritation.  
Eye Dam. 1      H318 Causes serious eye damage.  
Asp. Tox. 1      H304 May be fatal if swallowed and enters airways.  
Aquatic Chronic 1      H410 Very toxic to aquatic life with long lasting effects.
- **2.1.3 Additional information:** For the wording of the relevant risk phrases refer to section 16.

- **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:**  
2-Ethylhexyl phosphate diethanolamine salt  
Diisopropyl Naphthalene Isomers
- **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**  
P301+P310      IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
P321              Specific treatment (see on this label).

(Contd. on page 2)

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

**Trade name: Ultima Gold Radioactive LSC Standards**

(Contd. of page 1)

- P331 Do NOT induce vomiting.
- 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+P364 Take off contaminated clothing and wash it before reuse.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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

**Determination of endocrine-disrupting properties**

9016-45-9 | Renex 678

List I

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

CAS: 38640-62-9 EINECS: 254-052-6	Diisopropyl Naphthalene Isomers Asp. Tox. 1, H304; Aquatic Chronic 1, H410	50-75%
CAS: 9016-45-9 NLP: 500-024-6	Renex 678 Aquatic Chronic 2, H411; Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 73070-48-1 EINECS: 277-274-5	2-Ethylhexyl phosphate diethanolamine salt Eye Dam. 1, H318; Skin Irrit. 2, H315	10-25%

**SVHC**

9016-45-9 | Renex 678

- **Additional information:** For the wording of the relevant risk phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 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.
- **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.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

EU

(Contd. on page 3)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

Trade name: *Ultima Gold Radioactive LSC Standards*

(Contd. of page 2)

### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
*Wear protective equipment. Keep unprotected persons away.*
- **6.2 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.*
- **6.3 Methods and material for containment and cleaning up:**  
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Use neutralising agent.  
Dispose contaminated material as waste according to section 13.*
- **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**  
*Store in cool, dry place in tightly closed receptacles.  
No special precautions are necessary if used correctly.*
- **Information about fire - and explosion protection:** *No special measures required.*
- **7.2 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 container tightly sealed.*
- **Storage class:** 10
- **7.3 Specific end use(s)** *No further relevant information available.*

### **SECTION 8: Exposure controls/personal protection**

- **8.1 Control parameters**
- **Ingredients 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.*
- **8.2 Exposure controls**
- **Appropriate engineering controls** *No further data; see section 7.*
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:**  
*Keep away from foodstuffs, beverages and feed.  
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.*

(Contd. on page 4)

EU

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

Trade name: *Ultima Gold Radioactive LSC Standards*

(Contd. of page 3)

· **Hand protection**

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/face protection**

Tightly sealed goggles

## SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**

· <b>Physical state</b>	Fluid
· <b>Colour:</b>	According to product specification
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.
· <b>Melting point/freezing point:</b>	Undetermined.
· <b>Boiling point or initial boiling point and boiling range</b>	Undetermined.
· <b>Flammability</b>	Not applicable.
· <b>Lower and upper explosion limit</b>	
· <b>Lower:</b>	Not determined.
· <b>Upper:</b>	Not determined.
· <b>Flash point:</b>	260 °C
· <b>Auto-ignition temperature:</b>	383 °C
· <b>Decomposition temperature:</b>	Not determined.
· <b>pH</b>	Not determined.
· <b>Viscosity:</b>	
· <b>Kinematic viscosity</b>	Not determined.
· <b>Dynamic:</b>	Not determined.
· <b>Solubility</b>	
· <b>water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient n-octanol/water (log value)</b>	Not determined.
· <b>Vapour pressure:</b>	Not determined.
· <b>Density and/or relative density</b>	
· <b>Density:</b>	Not determined.
· <b>Relative density</b>	Not determined.
· <b>Vapour density</b>	Not determined.

(Contd. on page 5)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

Trade name: *Ultima Gold Radioactive LSC Standards*

(Contd. of page 4)

- **9.2 Other information**
- **Appearance:**
- **Form:** Fluid
- **Important information on protection of health and environment, and on safety.**
- **Ignition temperature:** Product is not selfigniting.
- **Explosive properties:** Product does not present an explosion hazard.
- **Solvent content:**
- **Organic solvents:** 0.5 %
- **Change in condition**
- **Evaporation rate** Not determined.

- **Information with regard to physical hazard classes**
- **Explosives** Void
- **Flammable gases** Void
- **Aerosols** Void
- **Oxidising gases** Void
- **Gases under pressure** Void
- **Flammable liquids** Void
- **Flammable solids** Void
- **Self-reactive substances and mixtures** Void
- **Pyrophoric liquids** Void
- **Pyrophoric solids** Void
- **Self-heating substances and mixtures** Void
- **Substances and mixtures, which emit flammable gases in contact with water** Void
- **Oxidising liquids** Void
- **Oxidising solids** Void
- **Organic peroxides** Void
- **Corrosive to metals** Void
- **Desensitised explosives** Void

### **SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **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:** No dangerous decomposition products known.

### **SECTION 11: Toxicological information**

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

**38640-62-9 Diisopropyl Naphthalene Isomers**

Oral	LD50	3,900 mg/kg (rat)
Dermal	LD50	4,500 mg/kg (rat)

(Contd. on page 6)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

**Trade name: Ultima Gold Radioactive LSC Standards**

(Contd. of page 5)

Inhalative	LC50/4 h	5.64 mg/l (rat)
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- **Skin corrosion/irritation** Causes skin irritation.
- **Serious eye damage/irritation** Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** May be fatal if swallowed and enters airways.
- **11.2 Information on other hazards**

· <b>Endocrine disrupting properties</b>
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9016-45-9	Renex 678	List I
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## SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Endocrine disrupting properties** For information on endocrine disrupting properties see section 11.
- **12.7 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.  
Hand over to hazardous waste disposers.  
Must be specially treated adhering to official regulations.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

## SECTION 14: Transport information

- |                                       |   |
|---------------------------------------|---|
| · <b>14.1 UN number or ID number</b>  |   |
| · <b>ADR, IMDG, IATA</b>              | UN3082  |
| · <b>14.2 UN proper shipping name</b> |   |
| · <b>ADR</b>                          | 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,<br>LIQUID, N.O.S. (Diisopropyl Naphthalene Isomers, Renex<br>678) |

(Contd. on page 7)

EU

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

Trade name: *Ultima Gold Radioactive LSC Standards*

(Contd. of page 6)

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

<ul style="list-style-type: none"> <li>· <b>Class</b></li> <li>· <b>Label</b></li> </ul>	<p><i>9 Miscellaneous dangerous substances and articles.</i></p> <p><i>9</i></p>
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· **14.4 Packing group**· **ADR, IMDG, IATA***III*· **14.5 Environmental hazards:***Product contains environmentally hazardous substances:*· **Marine pollutant:***Diisopropyl Naphthalene Isomers*· **Special marking (ADR):***Symbol (fish and tree)*· **Special marking (IATA):***Symbol (fish and tree)**Symbol (fish and tree)*· **14.6 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*· **14.7 Maritime transport in bulk according to IMO instruments***Not applicable.*· **Transport/Additional information:**· **ADR**· **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*· **Transport category***3*· **Tunnel restriction code***(-)*· **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*

EU

(Contd. on page 8)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

Trade name: *Ultima Gold Radioactive LSC Standards*

(Contd. of page 7)

## SECTION 15: Regulatory information

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

#### · Directive 2012/18/EU

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

#### · LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)

9016-45-9 | Renex 678

Sunset date: 2021-01-04

#### · REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 46b

#### · Regulation (EU) No 649/2012

9016-45-9 | Renex 678

Annex I Part 1  
Annex I Part 2

#### · DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

#### · REGULATION (EU) 2019/1148

#### · Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))

None of the ingredients is listed.

#### · Annex II - REPORTABLE EXPLOSIVES PRECURSORS

None of the ingredients is listed.

#### · Regulation (EC) No 273/2004 on drug precursors

None of the ingredients is listed.

#### · Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors

None of the ingredients is listed.

#### · National regulations:

#### · Other regulations, limitations and prohibitive regulations

#### · Substances of very high concern (SVHC) according to REACH, Article 57

9016-45-9 | Renex 678

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

## SECTION 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.

#### · 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  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals

(Contd. on page 9)



**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 28.03.2024

Version number 1

Revision: 18.05.2023

**Trade name: Ultima Gold Radioactive LSC Standards**

(Contd. of page 8)

*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**PBT: Persistent, Bioaccumulative and Toxic**SVHC: Substances of Very High Concern**vPvB: very Persistent and very Bioaccumulative**Skin Irrit. 2: Skin corrosion/irritation – Category 2**Eye Dam. 1: Serious eye damage/eye irritation – Category 1**Eye Irrit. 2: Serious eye damage/eye irritation – Category 2**Asp. Tox. 1: Aspiration hazard – Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2*

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