

1 Identification

- **Product identifier**
- **Trade name:** *Ultima Gold*
- **Article number:** 6013329, 6013321, 6013323, 6013326, 6013327
- **Application of the substance / the mixture** Laboratory chemicals
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Revvity Health Sciences B.V.
Rigaweg 22
9723 TH Groningen
The Netherlands
Phone: 0031 50 5445900
www.revvity.com
- **Information department:**
Quality Assurance, Environment, Safety & Health (QA/ESH)
SDS.Groningen@revvity.com
- **Emergency telephone number:**
+31 50 5445971
CHEMTREC (within U.S.A. and Canada) 1-800-424-9300
CHEMTREC (from outside U.S.A. and Canada) +1703-527-3887

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

Toxic to Reproduction 2 H361 Suspected of damaging fertility or the unborn child.
Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



GHS05 Corrosion

Eye Damage 1 H318 Causes serious eye damage.



GHS09 Environment

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



GHS07

Skin Irritation 2 H315 Causes skin irritation.

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

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Hazard pictograms



GHS05 GHS08 GHS09

Signal word Danger

Hazard-determining components of labeling:

Diisopropyl naphthalene isomers
bis(2-ethylhexyl) hydrogen phosphate
2,2'-iminodiethanol
Phosphoric acid, 2-ethylhexyl ester

Hazard statements

H315 Causes skin irritation.
H318 Causes serious eye damage.
H361 Suspected of damaging fertility or the unborn child.
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.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing.

Other hazards

Results of PBT and vPvB assessment

PBT:

38640-62-9 Diisopropyl naphthalene isomers

vPvB:

38640-62-9 Diisopropyl naphthalene isomers

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 Aspiration Hazard 1, H304 Aquatic Chronic 1, H410 PBT; vPvB	60-80%
9016-45-9	Alkylphenol Polyglycolether Skin Irritation 2, H315; Eye Irritation 2A, H319	10-20%
	bis(2-ethylhexyl) hydrogen phosphate Skin Corrosion 1B, H314 Acute Toxicity - Oral 4, H302	

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9016-45-9	Alkylphenol Polyglycoether <ul style="list-style-type: none"> ☠ Eye Damage 1, H318 ☠ Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315 	2.5-10%
12645-31-7	Phosphoric acid, 2-ethylhexyl ester <ul style="list-style-type: none"> ☠ Skin Corrosion 1B, H314 	2.5-10%
111-42-2	2,2'-iminodiethanol <ul style="list-style-type: none"> ☠ Carcinogenicity 2, H351; Toxic to Reproduction 2, H361; Specific Target Organ Toxicity - Repeated Exposure 2, H373 ☠ Eye Damage 1, H318 ☠ Acute Toxicity - Oral 4, H302; Skin Irritation 2, H315 ☠ Aquatic Chronic 3, H412 	2.5-5%
577-11-7	Sodium dioctyl sulphosuccinate <ul style="list-style-type: none"> ☠ Eye Damage 1, H318 ☠ Skin Irritation 2, H315 	0-2.5%
78-40-0	Triethyl phosphate <ul style="list-style-type: none"> ☠ Acute Toxicity - Oral 4, H302; Eye Irritation 2A, H319 	0-2.5%

· **Non-Dangerous components**

92-71-7	2,5-Diphenyloxazole (PPO)	0-2.5%
7732-18-5	water, distilled, conductivity or of similar purity	0-2.5%
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	0-2.5%

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

4 First-aid measures

- **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.
- **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.
CO2, extinguishing powder or water spray. Fight larger fires with water spray.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** Wear fully protective suit.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Keep people at a distance and stay upwind.

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Ensure adequate ventilation

· **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.

· **Methods and material for containment and cleaning up:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· **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 ³
	bis(2-ethylhexyl) hydrogen phosphate	15 mg/m ³
111-42-2	2,2'-iminodiethanol	3 mg/m ³
577-11-7	Sodium dioctyl sulphosuccinate	5.7 mg/m ³
78-40-0	Triethyl phosphate	23 mg/m ³
92-71-7	2,5-Diphenyloxazole (PPO)	2.5 mg/m ³
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	12 mg/m ³

· **PAC-2:**

38640-62-9	Diisopropyl naphthalene isomers	61 mg/m ³
	bis(2-ethylhexyl) hydrogen phosphate	160 mg/m ³
111-42-2	2,2'-iminodiethanol	28 mg/m ³
577-11-7	Sodium dioctyl sulphosuccinate	63 mg/m ³
78-40-0	Triethyl phosphate	250 mg/m ³
92-71-7	2,5-Diphenyloxazole (PPO)	27 mg/m ³
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	130 mg/m ³

· **PAC-3:**

38640-62-9	Diisopropyl naphthalene isomers	370 mg/m ³
	bis(2-ethylhexyl) hydrogen phosphate	980 mg/m ³
111-42-2	2,2'-iminodiethanol	130 mg/m ³
577-11-7	Sodium dioctyl sulphosuccinate	380 mg/m ³
78-40-0	Triethyl phosphate	320 mg/m ³
92-71-7	2,5-Diphenyloxazole (PPO)	160 mg/m ³
13280-61-0	1,4-Bis-(2-methylstyryl)-benzene (bis-MSB)	790 mg/m ³

7 Handling and storage

· **Handling:**

· **Precautions for safe handling** No special measures required.

· **Information about protection against explosions and fires:** Keep ignition sources away - Do not smoke.

· **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.

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- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Store receptacle in fume compartment.
- **Specific end use(s)** No further relevant information available.

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.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **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.
- **Breathing equipment:** Not necessary if room is well-ventilated.
- **Protection of hands:**



Protective gloves

EN ISO 374-1/Type B

- **Material of gloves**
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.2 mm
Breakthrough time: > 120 minutes
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.
- **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:**
Form: Fluid

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· Color:	Colorless
· Odor:	Characteristic
· pH-value at 20 °C (68 °F):	6
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	290 °C (554 °F)
· Flash point:	152 °C (305.6 °F)
· Auto igniting:	500 °C (932 °F)
· Ignition temperature:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
Lower:	0.4 Vol %
Upper:	4.7 Vol %
· Density at 20 °C (68 °F):	0.98 g/cm ³ (8.1781 lbs/gal)
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Solvent content:	
VOC content:	=<2.5 %
· Other information	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:** Carbon monoxide

11 Toxicological information

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

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

ATE (Acute Toxicity Estimate)

Oral	LD50	7,908 mg/kg
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38640-62-9 Diisopropyl naphthalene isomers

Oral	LD50	4,000 mg/kg (Rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Strong irritant with the danger of severe eye injury.

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- **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)**

111-42-2	2,2'-iminodiethanol	2B
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· **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:**

9016-45-9 Alkylphenol Polyglycoether

chronic NOEC/ECx >1 mg/l (Alge)

9016-45-9 Alkylphenol Polyglycoether

chronic NOEC/ECx >1 mg/l (Alge)

- **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:**

- **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

· **Results of PBT and vPvB assessment**

· **PBT:**

38640-62-9	Diisopropyl naphthalene isomers
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· **vPvB:**

38640-62-9	Diisopropyl naphthalene isomers
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- **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.



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

14 Transport information

· UN-Number · ADR, IMDG, IATA	UN3082
· UN proper shipping name · ADR · IMDG · IATA	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether), MARINE POLLUTANT ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether)
· Transport hazard class(es) · ADR  · Class · Label	9 (M6) Miscellaneous dangerous substances and articles 9
· IMDG, IATA  · Class · Label	9 Miscellaneous dangerous substances and articles 9
· Packing group · ADR, IMDG, IATA	III
· Environmental hazards: · Marine pollutant: · Special marking (ADR): · Special marking (IATA):	Product contains environmentally hazardous substances: Diisopropyl naphthalene isomers Yes Symbol (fish and tree) Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user · Hazard identification number (Kemler code): · EMS Number:	Warning: Miscellaneous dangerous substances and articles 90 F-A,S-F
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.

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· Transport/Additional information:	Not dangerous according to the above specifications.
· Remarks:	Special marking with the symbol (fish and tree).
· UN "Model Regulation":	UN3082, Environmentally hazardous substances, liquid, n.o.s. (Diisopropyl naphthalene isomers, Alkylphenol Polyglycoether), 9, III

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 ingredient is listed.

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

111-42-2 | 2,2'-iminodiethanol

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

38640-62-9	Diisopropyl naphthalene isomers	ACTIVE
	bis(2-ethylhexyl) hydrogen phosphate	ACTIVE
12645-31-7	Phosphoric acid, 2-ethylhexyl ester	ACTIVE
111-42-2	2,2'-iminodiethanol	ACTIVE
577-11-7	Sodium dioctyl sulphosuccinate	ACTIVE
78-40-0	Triethyl phosphate	ACTIVE
92-71-7	2,5-Diphenyloxazole (PPO)	ACTIVE
7732-18-5	water, distilled, conductivity or of similar purity	ACTIVE

· **Hazardous Air Pollutants**

111-42-2 | 2,2'-iminodiethanol

· **Proposition 65**

· **Chemicals known to cause cancer:**

111-42-2 | 2,2'-iminodiethanol

· **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)**

111-42-2 | 2,2'-iminodiethanol | A3

· **MAK (German Maximum Workplace Concentration)**

111-42-2 | 2,2'-iminodiethanol | 0.46 ppm; 2 mg/m³

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Printing date 11/03/2023

Reviewed on 11/03/2023

Trade name: Ultima Gold

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

None of the ingredients is listed.

· **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:**

Diisopropyl naphthalene isomers
bis(2-ethylhexyl) hydrogen phosphate
2,2'-iminodiethanol
Phosphoric acid, 2-ethylhexyl ester

· **Hazard statements**

H315 Causes skin irritation.
H318 Causes serious eye damage.
H361 Suspected of damaging fertility or the unborn child.
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.
P302+P352 If on skin: Wash with plenty of water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362 Take off contaminated clothing.

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H351 Suspected of causing cancer.
H361 Suspected of damaging fertility or the unborn child.
H373 May cause damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

· **Department issuing SDS:** Quality Assurance, Environment, Safety & Health (QA/ESH)· **Contact:** SDS.Groningen@revvity.com

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Printing date 11/03/2023

Reviewed on 11/03/2023

Trade name: *Ultima Gold*

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· **Date of preparation / last revision** 11/03/2023· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

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)

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

Acute Toxicity - Oral 4: Acute toxicity – Category 4

Skin Corrosion 1B: Skin corrosion/irritation – Category 1B

Skin Irritation 2: Skin corrosion/irritation – Category 2

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

Eye Irritation 2A: Serious eye damage/eye irritation – Category 2A

Carcinogenicity 2: Carcinogenicity – Category 2

Toxic to Reproduction 2: Reproductive toxicity – Category 2

Specific Target Organ Toxicity - Repeated Exposure 2: Specific target organ toxicity (repeated exposure) – Category 2

Aspiration Hazard 1: Aspiration hazard – Category 1

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

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

· *** Data compared to the previous version altered.**

US