

Trade name:

Western Lightning Plus

Article number:

- NEL103E001EA Western Lightning Plus-ECL Enhanced Chemiluminescence Substrate for 200 cm² of membrane
- NEL103001EA Western Lightning Plus-ECL Enhanced Chemiluminescence Substrate for 1000 cm² of membrane
- NEL104001EA Western Lightning Plus-ECL Enhanced Chemiluminescence Substrate for 2500 cm² of membrane
- NEL105001EA Western Lightning Plus-ECL Enhanced Chemiluminescence Substrate for 5000 cm² of membrane

012024 V1.0

NEL103E001EA:

Composition		Hazards identification
ORT2751	Luminol Reagent Plus	GHS08, H360
ORT2651	Oxidizer Reagent Plus	

NEL103001EA:

Composition		Hazards identification
ORT2753	Luminol Reagent Plus	GHS08, H360
ORT2653	Oxidizer Reagent Plus	

NEL104001EA:

Composition		Hazards identification
ORT2755	Luminol Reagent Plus	GHS08, H360
ORT2655	Oxidizer Reagent Plus	

NEL105001EA:

Composition		Hazards identification
ORT2755	Luminol Reagent Plus	GHS08, H360
ORT2655	Oxidizer Reagent Plus	

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Hazardous according to criteria of Australian Safety and Compensation Council.

1 Identification

- **Product identifier**
- **Trade name:** Luminol Reagent Plus
- **Article number:** 0RT2751, 0RT2753, 0RT2755
- **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
- **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
Australian contact address:
Revvity
Level 2 ,Building C, Tenancy A,
211 Wellington Road,
Mulgrave,
VIC 3170
Australia
Phone: +613 9212 8500
- **Further information obtainable from:**
Quality Assurance, Environment, Safety & Health (QA/ESH)
SDS.Groningen@revvity.com
- **Emergency telephone number:**
+31 50 5445971
CHEMTREC (within Australia) +(61)-290372994
CHEMTREC (from outside Australia) +1 703-527-3887

2 Hazard(s) Identification

- **Classification of the substance or mixture**



GHS08 health hazard

Repr. 1B H360FD May damage fertility. May damage the unborn child.

- **Label elements**

- **GHS label elements**

The product is classified and labelled according to the Globally Harmonised System (GHS).

- **Hazard pictograms**



GHS08

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- **Signal word** *Danger*
- **Hazard statements**
H360FD May damage fertility. May damage the unborn child.
- **Precautionary statements**
 - P201 *Obtain special instructions before use.*
 - P202 *Do not handle until all safety precautions have been read and understood.*
 - P280 *Wear protective gloves/protective clothing/eye protection/face protection.*
 - P308+P313 *IF exposed or concerned: Get medical advice/attention.*
 - P405 *Store locked up.*
 - P501 *Dispose of contents/container in accordance with local/regional/national/international regulations.*
- **Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** *Not applicable.*
- **vPvB:** *Not applicable.*

3 Composition and Information on Ingredients

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

Dangerous components:

1303-96-4	disodium tetraborate decahydrate <ul style="list-style-type: none"> ⚠ Repr. 1B, H360 ⚠ Serious eye damage/irritation – Category 2A, H319 	≤2.5%
20666-12-0	3-Aminophthalhydrazide monosodium salt <ul style="list-style-type: none"> ⚠ Skin Irrit. 2, H315; Serious eye damage/irritation – Category 2A, H319; STOT SE 3, H335 	≤2.5%
501-98-4	p-Coumaric acid trans-4-Hydroxycinnamic acid <ul style="list-style-type: none"> ⚠ Skin Irrit. 2, H315; Serious eye damage/irritation – Category 2A, H319; STOT SE 3, H335 	≤2.5%
1310-73-2	Sodium hydroxide <ul style="list-style-type: none"> ⚠ Met. Corr. 1, H290; Skin Corr. 1A, H314 	≤2.5%

SVHC

1303-96-4	disodium tetraborate decahydrate	
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Non-dangerous components

67-68-5	dimethyl sulfoxide	≤2.5%
7732-18-5	water, distilled, conductivity or of similar purity	80-100%

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

4 First Aid Measures

- **After inhalation:** *Supply fresh air; consult doctor in case of complaints.*
- **After skin contact:** *Generally the product does not irritate the skin.*
- **After eye contact:** *Rinse opened eye for several minutes under running water.*
- **After swallowing:** *If symptoms persist consult doctor.*
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed** *No further relevant information available.*

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

5 Fire Fighting Measures

- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Protective equipment:** No special measures required.

6 Accidental Release Measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **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.
- **Methods and material for containment and cleaning up:** Pick up mechanically.
- **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.

7 Handling and Storage

- **Handling:**
- **Precautions for safe handling** No special precautions are necessary if used correctly.
- **Information about fire - and explosion protection:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls and personal protection

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

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

1303-96-4 disodium tetraborate decahydrate

WES | Long-term value: 5 mg/m³

- **Additional information:** The lists valid during the making were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **Respiratory protection:** Not required.
- **Protection of hands:**



Protective gloves

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EN ISO 374-1/Type B

· **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.1 mm

Breakthrough time > 480 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

· **Body protection:** Protective work clothing

9 Physical and Chemical Properties

· **General Information**

· **Appearance:**

· **Form:**

Liquid

· **Colour:**

Light yellow

· **Odour:**

Odourless

· **Odour threshold:**

Not determined.

· **pH-value:**

Not applicable.

· **Change in condition**

· **Melting point/freezing point:**

Undetermined.

· **Initial boiling point and boiling range:** 100 °C

· **Flash point:**

Not applicable.

· **Flammability (solid, gas):**

Not determined.

· **Decomposition temperature:**

Not determined.

· **Ignition temperature:**

Product is not selfigniting.

· **Explosive properties:**

Product does not present an explosion hazard.

· **Explosion limits:**

· **Lower:**

Not determined.

· **Upper:**

Not determined.

· **Vapour pressure at 20 °C:**

23 hPa

· **Density:**

Not determined.

· **Relative density**

Not determined.

· **Vapour density**

Not applicable.

· **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.

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· Other information

No further relevant information available.

10 Stability and Reactivity

- **Reactivity** No further relevant information available.
- **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** Based on available data, the classification criteria are not met.
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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**
May damage fertility. May damage the unborn child.
- **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** Based on available data, the classification criteria are not met.

12 Ecological Information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:** Not hazardous for water.
- **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 together with household garbage. Do not allow product to reach sewage system.

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

14 Transport information

· UN-Number · ADG, ADN, IMDG, IATA	Void
· UN proper shipping name · ADG, ADN, IMDG, IATA	Void
· Transport hazard class(es) · ADG, ADN, IMDG, IATA · Class	Void
· Packing group · ADG, IMDG, IATA	Void
· Environmental hazards: · Marine pollutant:	No
· Special precautions for user	Not applicable.
· Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· UN "Model Regulation":	Void

15 Regulatory information

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

· Australian Inventory of Industrial Chemicals		
1303-96-4	disodium tetraborate decahydrate	
1310-73-2	Sodium hydroxide	
67-68-5	dimethyl sulfoxide	
7732-18-5	water, distilled, conductivity or of similar purity	
· Standard for the Uniform Scheduling of Medicines and Poisons		
1310-73-2	Sodium hydroxide	S5+APPENDIX C, S6+APPENDIX C
67-68-5	dimethyl sulfoxide	S4, S6

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



GHS08

- **Signal word** Danger
- **Hazard statements**
H360FD May damage fertility. May damage the unborn child.

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· **Precautionary statements**

- P201 Obtain special instructions before use.
 P202 Do not handle until all safety precautions have been read and understood.
 P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P308+P313 IF exposed or concerned: Get medical advice/attention.
 P405 Store locked up.
 P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Directive 2012/18/EU**

- **Named dangerous substances - ANNEX I** 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**

1303-96-4	disodium tetraborate decahydrate
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- **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**

- H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H360 May damage fertility or the unborn child.

· **Department issuing SDS:** Quality Assurance, Environment, Safety & Health (QA/ESH)

· **Contact:** SDS.Groningen@revvity.com

· **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)
 PBT: Persistent, Bioaccumulative and Toxic
 SVHC: Substances of Very High Concern
 vPvB: very Persistent and very Bioaccumulative
 Met. Corr.1: Corrosive to metals – Category 1
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A
 Skin Irrit. 2: Skin corrosion/irritation – Category 2
 Serious eye damage/irritation – Category 2A: Serious eye damage/eye irritation – Category 2A
 Repr. 1B: Reproductive toxicity – Category 1B
 Repr. 1B: Reproductive toxicity – Category 1B
 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

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