

	<b>SAFETY DATA SHEET</b>	
<b>ARIES® Assay Kit</b>	12 <sup>th</sup> July 2022	Page 1 of 20

Complying with Regulation (EC) No 1272/2008 (CLP) as amended by Commission Regulation (EU) 2020/878 and GB CLP. (UK)

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

**Product name:** ARIES® Assay Kit

**Other means of identification:**

**Commercial name(s):** ARIES® HSV 1&2 Assay, ARIES® *C. difficile* Assay, ARIES® Flu A/B and RSV Assay, ARIES® GBS Assay, ARIES® Norovirus Assay, ARIES® *Bordetella* Assay, ARIES® MRSA Assay, ARIES® Group A Strep Assay, ARIES® SARS-CoV-2 Assay (24) Cassettes, ARIES® Flu A/B & RSV+SARS-CoV-2 Assay

**Product Codes:** 50-10011, 50-10017, 50-10031, 50-10012, 50-10018, 50-10014, 50-10020, 50-10015, 50-10021, 50-10019, 50-10036, 50-10037, 50-10034, 50-10040, 50-10041, 50-10047, 50-10048, 50-10051, 50-10055, 50-10054

**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

**Relevant identified uses:** For Professional use only. Use as per Product Insert  
**Uses advised against:** Uses other than those described above.

**1.3 Details of the supplier of the safety data sheet**

**Company Name:** Luminex Corporation.  
**Company Address:** 12212 Technology Blvd  
Austin, Texas 78727  
**Company Tel (Enquiries):** Tel: 1-512-381-4397  
Fax: 1-512-219-5114  
<http://www.luminexcorp.com>

**1.4 Emergency telephone number**

**Emergency telephone number (including hours of operation):** 1-(512) 381-4397  
**Emergency email:** [support@luminexcorp.com](mailto:support@luminexcorp.com)  
**Hours of operations:** 24/7

**Poison Centre Information:**

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland.

Members of the public:

In an emergency, if the patient has collapsed or is not breathing properly, call 999

For medical advice contact:

NHS 111 in England: 111

NHS 24 in Scotland: 111

NHS Direct in Wales: 111 or 0845 4647

In Northern Ireland: contact your local GP or pharmacist during normal hours; click here for GP services Out-of-Hours.

In Ireland: contact NPIC on (01) 809 2166 (8 am to 10 pm); outside of these hours contact your GP or hospital emergency department.

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

Classification in accordance to Regulation (EC) No. 1272/2008 (CLP/GHS) as adopted by the United Kingdom (GB CLP)

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**Overall Classification for the kit:**

<b>Product name</b>	<b>GHS Classification</b>
<b>ARIES<sup>®</sup> HSV 1&amp;2 Assay</b>	Flammable Liquid, Category 2 Skin Corrosion Category 1C Acute Toxicity, Oral, Category 4 Acute Toxicity, Dermal, Category 4 Serious Eye Damage, Category 1 Acute Toxicity, Inhalation, Category 4 Specific Target Organ Toxicity, Single Exposure, Category 3 Hazardous to the Aquatic Environment, Chronic, Category 3

**Classification of the compartments of the kit:**

**Plug 1**

Not classified as hazardous

**Plug 2**

Flam. Liq. 2, H225  
 Eye Irrit. 2, H319  
 STOT SE 3, H336

**Plug 3**

Flam. Liq. 2, H225  
 Eye Irrit. 2, H319  
 STOT SE 3, H336

**Plug 4**

Skin Corr 1C H314  
 Acute Tox 4, oral, H302  
 Acute Tox 4, dermal, H312  
 Eye Dam 1 H318  
 Acute Tox 4, inhalation, H332  
 Aquatic chronic 3 H412

**Wash 1**

Flam. Liq. 2, H225  
 STOT SE 3, H336  
 Skin Corr 1C H314  
 Eye Dam 1 H318

**Wash 2**

Not classified as hazardous

**Elution**

Not classified as hazardous

**PCR Tube**

Not classified as hazardous

**2.2 Label elements**

**Labelling in accordance with Regulation 1272/2008 (GB CLP)**

**Labelling information for the kit:**

<b><i>Luminex</i></b> <sup>®</sup>	<b>SAFETY DATA SHEET</b>	
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Hazard pictograms:



Signal word:

**DANGER**

Hazard statements:

H225 - Highly flammable liquid and vapour  
H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.  
H314 - Causes severe skin burns and eye damage  
H336 - May cause drowsiness or dizziness  
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements:

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER/doctor  
P370+P378 - In case of fire: Use water spray (fog), carbon dioxide (CO<sub>2</sub>), dry chemical powder or foam to extinguish.

Supplemental Hazard Statements.

None known

**Labelling information for the compartments of the kit:**

**PLUG 1**

Hazard pictograms:

None required

Signal word:

None required

Hazard statements:

None required

Precautionary Statements:

None required

Supplemental Hazard Statements.

None known

**PLUG 2:**

Hazard pictograms:



Signal word:

**DANGER**

Hazard statements:

H225 - Highly flammable liquid and vapour

**Precautionary Statements:** H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness  
P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing dust/fume/gas/mist/ vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTRE/doctor if you feel unwell.  
P403+P235 - Store in a well-ventilated place. Keep cool.

**Supplemental Hazard Statements.** None known

**PLUG 3**

**Hazard pictograms:**



**Signal word:** **DANGER**

**Hazard statements:** H225 - Highly flammable liquid and vapour  
H319 - Causes serious eye irritation  
H336 - May cause drowsiness or dizziness

**Precautionary Statements:** P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P261 - Avoid breathing dust/fume/gas/mist/ vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 - Call a POISON CENTRE/doctor if you feel unwell.  
P403+P235 - Store in a well-ventilated place. Keep cool.

**Supplemental Hazard Statements.** None known

**PLUG 4**

**Hazard pictograms:**



**Signal word:** **DANGER**

**Hazard statements:** H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.  
H314 - Causes severe skin burns and eye damage  
H412 - Harmful to aquatic life with long lasting effects

**Precautionary Statements:** P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 - Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER/doctor

**Supplemental Hazard Statements.** None known

**WASH 1:****Hazard pictograms:**

**Signal word:** **DANGER**

**Hazard statements:** H225 - Highly flammable liquid and vapour  
H314 - Causes severe skin burns and eye damage  
H336 - May cause drowsiness or dizziness

**Precautionary Statements:** P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P303+P361+P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 - Immediately call a POISON CENTER/doctor  
P370+P378 - In case of fire: Use water spray (fog), carbon dioxide (CO<sub>2</sub>), dry chemical powder or foam to extinguish.

**Supplemental Hazard Statements.** None known

**WASH 2:**

**Hazard pictograms:** None required  
**Signal word:** None required  
**Hazard statements:** None required

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**Precautionary Statements:** None required

**Supplemental Hazard Statements.** None known

**ELUTION:**

**Hazard pictograms:** None required  
**Signal word:** None required  
**Hazard statements:** None required  
**Precautionary Statements:** None required

**Supplemental Hazard Statements.** None known

**PCR TUBE**

**Hazard pictograms:** None required  
**Signal word:** None required  
**Hazard statements:** None required  
**Precautionary Statements:** None required

**Supplemental Hazard Statements.** None known

**2.3 Other hazards**

This substance/mixture contains Poly(oxy-1,2-ethanediyl),  $\alpha$ -[(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- which is considered to be an endocrine-disrupting substance.

No components are classified as persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances :**  
Not applicable

**3.2 Mixture :**

**PLUG 1:**  
Not classified as a hazardous mixture and therefore does not require reporting in this section.

**PLUG 2:**

Product/ Ingredient name	Identifiers	%	Classification 1272/2008/EC	Nano material form	M Factor	Specific conc'n limits (SCL)	Acute toxicity estimate (ATE)
<b>Isopropanol</b>	CAS No 67-63-0  EC No 200-661-7  REACH No 01- 2119457558- 25-XXXX	> 95%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	No	1	No SCL in Annex VI	No ATE in Annex VI

**PLUG 3:**

Product/ Ingredient name	Identifiers	%	Classification 1272/2008/EC	Nano material form	M Factor	Specific conc'n limits (SCL)	Acute toxicity estimate (ATE)
<b>Isopropanol</b>	CAS No 67-63-0  EC No 200-661-7  REACH No 01- 2119457558- 25-XXXX	80- 100%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	No	1	No SCL in Annex VI	No ATE in Annex VI

**PLUG 4:**

Product/ Ingredient name	Identifiers	%	Classification 1272/2008/EC	Nano material form	M Factor	Specific conc'n limits (SCL)	Acute toxicity estimate (ATE)
<b>Guanidinium Thiocyanate</b>	CAS No 593-84-0  EC No 209-812-1  REACH No 01- 2120735072- 65-XXXX	50-55%	Acute Tox. 4 (oral), H302 Acute Tox. 4 (dermal), H312 Acute Tox. 4 (inhalation), H332 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	No	1	No SCL in Annex VI	No ATE in Annex VI
<b>Poly(oxy- 1,2- ethanediyl), α-[4-(1,1,3,3- tetramethylb utyl)phenyl]- ω-hydroxy-</b>	CAS No 9002-93-1  EC No 618-344-0  REACH No n/a	3-5%	Acute Tox. 4, (oral) H302 Skin Irrit 2 H315 Eye Dam 1, H318 Aquatic Chronic 2, H411	No	1	No SCL in Annex VI	No ATE in Annex VI

**WASH 1:**

Product/ Ingredient name	Identifiers	%	Classification 1272/2008/EC	Nano material form	M Factor	Specific conc'n limits (SCL)	Acute toxicity estimate (ATE)
<b>Isopropanol</b>	CAS No 67-63-0  EC No 200-661-7  REACH No 01- 2119457558- 25-XXXX	25-50%	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	No	1	No SCL in Annex VI	No ATE in Annex VI
<b>Guanidinium Thiocyanate</b>	CAS No 593-84-0  EC No 209-812-1  REACH No 01- 2120735072- 65-XXXX	5-10%	Acute Tox. 4 (oral), H302 Acute Tox. 4 (dermal), H312 Acute Tox. 4 (inhalation), H332 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	No	1	No SCL in Annex VI	No ATE in Annex VI

**WASH 2:**

Not classified as a hazardous mixture and therefore does not require reporting in this section.

**ELUTION:**

Not classified as a hazardous mixture and therefore does not require reporting in this section.

**PCR TUBE:**

Not classified as a hazardous mixture and therefore does not require reporting in this section.

**Nanoforms present in product:** Not applicable

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in section 8 .

See section 16 for the full text of the H and P statements declared above

**SECTION 4: FIRST AID MEASURES**

**Eye contact:** In case of eye contact, remove contact lenses and rinse immediately with plenty of water, including under the eyelids, for at least 15 mins. Get medical attention if symptoms develop.

**Skin contact:** Wash with water and soap and rinse thoroughly. Seek medical advice if irritation or pain develops.

**Inhalation:** Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If not breathing, give artificial respiration. If breathing is



difficult, give oxygen. Oxygen should only be administered by qualified personnel. Seek medical advice.

**Ingestion:** Do NOT induce vomiting. Get medical attention immediately. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything by mouth to an unconscious person.

#### **4.2 Most important symptoms and effects, both acute and delayed**

**Kit:** Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage. May cause drowsiness or dizziness.

**Plug 1:** None known

**Plug 2:** Causes severe eye irritation. May cause drowsiness or dizziness.

**Plug 3:** Causes severe eye irritation. May cause drowsiness or dizziness.

**Plug 4:** Harmful if swallowed, in contact with skin or if inhaled. Causes severe skin burns and eye damage.

**Wash 1:** Causes severe skin burns and eye damage. May cause drowsiness or dizziness

**Wash 2:** None known

**Elution:** None known

**PCR Tube:** None known

#### **4.3 Indication of any immediate medical attention and special treatment needed**

If any symptoms are observed, contact a physician and give them this SDS sheet. Provide general supportive measures and treat symptomatically:

### **SECTION 5: FIREFIGHTING MEASURES**

#### **5.1 Extinguishing media**

Suitable extinguishing media: In case of fire: Use water spray (fog), carbon dioxide (CO<sub>2</sub>), dry chemical powder or foam to extinguish.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

#### **5.2 Special hazards arising from the substance or mixture**

Highly flammable. Easily ignited by heat, sparks or flames or other sources of ignition. Containers should be grounded and bonded. Vapours are initially heavier than air and spread along ground. Vapours may reach an ignition source, and flashback. Runoff to sewer may create fire or explosion hazard downstream from the source. Gases may form explosive mixtures with air.

Hazardous combustion products:

Carbon dioxide, carbon monoxide, nitrogen oxides, sulphur oxides.

#### **5.3 Advice for firefighters**

Move containers from fire area if you can do it without risk. Cool containers with flooding quantities of water until well after fire is out. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Keep out of drains, sewers, ditches and waterways. Inhalation is a health risk. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Wear self-contained breathing apparatus and protective clothing. In addition, wear other appropriate protective equipment as conditions warrant (see Section 8).

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

### **6.1 Personal precautions, protective equipment and emergency procedures**

#### **For non-emergency personnel**

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering.

#### **For emergency responders**

For large spillages, evacuate the area of all non-essential personnel. Keep all sources of ignition and hot metal surfaces away from spill/release if safe to do so. The use of explosion-proof electrical equipment is recommended. Avoid contact with skin, eyes and clothing. Ventilate contaminated area thoroughly. Avoid contact with spilled or released material. Immediately remove all contaminated clothing. Stay upwind and away from spill/release.

Wear appropriate protective equipment, such as gloves, goggles and protective clothing, as conditions warrant (see Section 8).

See Sections 2 and 7 for additional information on hazards and precautionary measures.

See Section 13 for disposal guidance.

### **6.2 Environmental precautions**

Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

### **6.3 Methods and materials for containment and cleaning up**

Shut off leaks, if possible. Remove all possible sources of ignition in the surrounding area. Use appropriate containment (of product and firefighting water) to avoid environmental contamination. Absorb spill with inert material and place in suitable container for disposal.

### **6.4 Reference to other sections**

See Section 1 for emergency contact information.

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**

Keep away from heat, sparks and open flames. No smoking. Use only with adequate ventilation. Wear appropriate personal protective equipment and use exposure controls as indicated in Section 8. Avoid contact with skin and eyes. Avoid breathing product dust or vapours. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Non-sparking tools should be used. Ground and bond all transfer and storage equipment to prevent static sparks. Do not enter confined spaces without following proper entry procedures. Remove contaminated clothing immediately. Wash with soap and water after working with this product.

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

Keep away from flame, sparks, excessive temperatures and open flames. Keep away from strong oxidizers, ignition sources and heat.

Storage temperature: Store at 15°C to 30°C upon receipt

**Seveso Directive - Reporting thresholds (in tonnes)****Danger criteria**

Component	Category	Notification and MAP Threshold (tonnes)	Safety report threshold (tonnes)
Plug 2 - Isopropanol	P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b	5000	50000
Plug 3 - Isopropanol	P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b	5000	50000
Wash 1 - Isopropanol	P5c FLAMMABLE LIQUIDS Flammable liquids, Categories 2 or 3 not covered by P5a and P5b	5000	50000

**7.3 Specific end use(s):**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION****8.1 Control parameters****Occupational exposure limit values:**

Ingredient name	CAS Number	Occupational exposure limits	Source
Isopropanol (Plug 2, Plug 3, Wash 1)	67-63-0	Short-term value: 500 ppm, 1250 mg/m <sup>3</sup>  Long-term value: 400 ppm, 999 mg/m <sup>3</sup>	UK EH40/2005 Workplace exposure limits (updated 2020)
Guanidinium Thiocyanate (Plug 4, Wash 1)	593-84-0	Short-term value: None known  Long-term value: None known	UK EH40/2005 Workplace exposure limits (updated 2020)
Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy- (Plug 4)	9002-93-1	Short-term value: None known  Long-term value: None known	UK EH40/2005 Workplace exposure limits (updated 2020)

**Monitoring procedures:** Use methods described in European Standards.

**Derived No Effect Level (DNEL):****Isopropanol (Plug 2, Plug 3, Wash 1)**

Workers	Inhalation	Long-term systemic effects	500 mg/m <sup>3</sup>
Workers	Dermal	Long-term systemic effects	888 mg/kg bw/day
General population	Inhalation	Long-term systemic effects	89 mg/m <sup>3</sup>
General population	Dermal	Long-term systemic effects	319 mg/kg bw/day
General population	Oral	Long-term systemic effects	26 mg/kg bw/day

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#### Guanidinium Thiocyanate (Plug 4, Wash 1)

Workers	Inhalation	Long-term systemic effects	1.092 mg/m <sup>3</sup>
Workers	Inhalation	Short-term systemic effects	3.28 mg/m <sup>3</sup>
Workers	Dermal	Long-term systemic effects	0.31 mg/kg bw/day
General population	Inhalation	Long-term systemic effects	0.27 mg/m <sup>3</sup>
General population	Dermal	Long-term systemic effects	0.155 mg/kg bw/day
General population	Oral	Long-term systemic effects	0.155 mg/kg bw/day

#### Poly(oxy-1,2-ethanediyl), $\alpha$ -[4-(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- (Plug 4)

None known

#### Predicted No Effect Concentration (PNEC):

#### Isopropanol (Plug 2, Plug 3, Wash 1)

Compartment	Value
Fresh water	140.9 mg/L
Marine water	140.9 mg/L
Sewage treatment plant	2251 mg/L
Fresh water sediment	552 mg/kg sediment dw
Marine sediment	552 mg/kg sediment dw
Soil	28 mg/kg soil dw
Secondary poisoning for predators	160 mg/kg food

#### Guanidinium Thiocyanate (Plug 4, Wash 1)

Compartment	Value
Fresh water	194 $\mu$ g/L
Marine water	19.4 $\mu$ g/L
Sewage treatment plant	20 mg/L
Fresh water sediment	750 $\mu$ g/kg sediment dw
Marine sediment	75 $\mu$ g/kg sediment dw
Soil	37 $\mu$ g/kg soil dw

#### Poly(oxy-1,2-ethanediyl), $\alpha$ -[4-(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- (Plug 4)

None known

### 8.2 Exposure controls

#### Appropriate Engineering Measures

No special ventilation requirements. Apply technical measures to comply with the occupational exposure limits. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Ensure adequate ventilation to keep airborne concentrations low. Do not empty waste into water drains.

#### Individual protection measures, such as personal protective equipment:

Eye and face protection: Not required under normal conditions of use.

Skin protection:

Hand protection: Not required under normal conditions of use.

Other skin protection: Not required under normal conditions of use. Wash hands after use.

Respiratory protection: Not required under normal conditions of use.

Thermal hazards: None known.

**Environmental exposure controls:** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains or water systems.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties**

Physical State:	Liquid. PCR tube mix is solid
Colour:	Mixture - Black. Plug 1 - Colourless. Plug 2 - Colourless. Plug 3 - Colourless. Plug 4 - Colourless. Wash 1 - Colourless. Wash 2 - Colourless. Elution - Colourless. PCR Tube - White.
Odour and odour threshold:	Mixture - Odourless. Plug 1 - Odourless. Plug 2 - Odourless. Plug 3 - Odourless Plug 4 - Odourless Wash 1 - Odourless. Wash 2 - Odourless Elution - Odourless PCR Tube - Not available
Melting point/Freezing point:	Not available
Boiling point or initial boiling point and boiling range:	Not available
Flammability:	Contains flammable liquid
Lower and upper explosion limit::	
Lower (%):	Not available
Upper (%):	Not available
Flash point:	Mixture - Closed cup: 27°C Plug 1 - Not available Plug 2 - Closed cup: 11.7°C Plug 3 - Closed cup: 11.7°C Plug 4 - Not available. Wash 1 - Closed cup: 21°C Wash 2 - Not available. Elution - Not available. PCR Tube - Not available.
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
pH:	Mixture - 5.5 Plug 1 - Not available Plug 2 - Not available. Plug 3 - Not available.

Plug 4 - Not available.  
Wash 1 - Not available.  
Wash 2 - Not available.  
Elution - Not available.  
PCR Tube - Not available.

Kinematic viscosity: Not available  
Solubility: Not available  
Partition coefficient  
n-octanol/water (log value): Not available  
Vapour pressure: Not available  
Density and/or relative density: Not available  
Relative vapour density: Not available  
Decomposition temperature: Not available  
Particle characteristics: Not available

### **9.2 Other information:**

Information with Regard to  
Physical Hazard Classes: None known  
Other Safety Characteristics: None known

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1 Reactivity**

This product is not expected to be reactive under normal handling and storage conditions.

### **10.2 Chemical stability**

Material is stable under normal conditions.

### **10.3 Possibility of hazardous reactions**

Hazardous polymerization does not occur.

### **10.4 Conditions to avoid**

Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

### **10.5 Incompatible materials**

Strong oxidizing agents and moisture

### **10.6 Hazardous Decomposition products:**

Under normal conditions of storage and use, hazardous decomposition products should not be produced

## **SECTION 11: TOXICOLOGICAL INFORMATION**

### **11.1 Information on toxicological effects**

**Acute toxicity:** Harmful if swallowed, in contact with skin or if inhaled.

<b>Product/ingredient name</b>	<b>Test</b>	<b>Species</b>	<b>Dose</b>
<b>Isopropanol (Plug 2, Plug 3, Wash 1)</b>	LD50 Oral	Rat	5840 mg/kg
	LD50 Dermal	Rabbit	16.4 mL/kg
	LC50 Inhalation	Rat	> 10,000 ppm 4h

Product/ingredient name	Test	Species	Dose
Guanidinium Thiocyanate (Plug 4, Wash 1)	LD50 Oral LD50 Dermal LC50 Inhalation	Rat Rabbit Rat	354 mg/kg > 2 000 mg/kg > 17273 mg/L 4h
Poly(oxy-1,2-ethanediyl), $\alpha$ -[4-(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- (Plug 4)	LD50 Oral LD50 Dermal LC50 Inhalation	Rat Rabbit Rat	None known None known None known

<b>Skin corrosion/irritation:</b>	Causes severe skin burns (Plug 4, Wash 1).
<b>Serious eye damage/eye irritation:</b>	Causes serious eye damage (Plug 4, Wash 1). Causes serious eye irritation (Plug 2, Plug 3)
<b>Respiratory or skin sensitization:</b>	Not expected to cause respiratory sensitization. Not expected to cause skin sensitization or allergic reaction.
<b>Germ cell mutagenicity:</b>	This product is not expected to cause genetic defects.
<b>Carcinogenicity:</b>	This product is not expected to cause cancer.
<b>Reproductive toxicity:</b>	Not expected to cause damage to fertility or the unborn child.
<b>STOT – Single exposure:</b>	May cause drowsiness or dizziness after a single exposure (Plug 2, Plug 3, Wash 1).
<b>STOT – Repeat exposure:</b>	This product is not expected to cause specific target organ toxicity after prolonged or repeated exposure.
<b>Aspiration hazard:</b>	Not expected to cause an aspiration hazard.
<b>11.2 Information on other hazards:</b>	
<b>Endocrine disrupting properties:</b>	Poly(oxy-1,2-ethanediyl), $\alpha$ -[(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- is classified as having endocrine disrupting properties and is on the Candidate List of substances of very high concern.
<b>Information on other hazards:</b>	None known.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity:**

Substance name	Toxicity to fish / other aquatic invertebrates
Isopropanol (Plug 2, Plug 3, Wash 1)	Fish - LC50 Pimephales promelas 9640 mg/L 96 h Invertebrates - EC50 Daphnia magna 13299 mg/L 48 h Algae - EC50 Desmodesmus subspicatus >1000 mg/L 96 h
Guanidinium Thiocyanate (Plug 4, Wash 1)	Fish - LC50 Poecilia reticulata 89.1 mg/l 96 h Invertebrates - EC50 Daphnia magna 42.4 mg/L 48 h
Poly(oxy-1,2-ethanediyl), $\alpha$ -[4-(1,1,3,3-tetramethylbutyl)phenyl]	Fish - LC50 Pimephales promelas 4 - 8.9 mg/l 96 h Invertebrates - EC50 Daphnia magna 18 - 26 mg/L 48 h



<b>Substance name</b>	<b>Toxicity to fish / other aquatic invertebrates</b>
<b>-<math>\omega</math>-hydroxy- (Plug 4)</b>	

**12.2 Persistence and Degradability:**

No data available for this product

**12.3 Bioaccumulative potential:**

Isopropanol (Plug 2, Plug 3, Wash 1) - LogPow -0.05 Low potential

**12.4 Mobility in soil:**

No data available for this product

**12.5 Results of PBT and vPvB assessment:**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Endocrine disrupting properties**

Poly(oxy-1,2-ethanediyl),  $\alpha$ -[(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy- is classified as having endocrine disrupting properties and is on the Candidate List of substances of very high concern.

**12.7 Other adverse effects:**

None known.

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods:****Methods of disposal**

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous Waste**

The classification of the product may meet the criteria for a hazardous waste.

**Contaminated packaging – methods of disposal**

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered where recycling is not feasible.

**Special precautions**

This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid disposal of spilt material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: TRANSPORT INFORMATION****International transport regulations****14.1 UN number:**

ADR/RID/ADN: UN 1219

IMDG: UN 1219

IATA: UN 1219

**14.2 Proper shipping name:**



ADR/RID/ADN: ISOPROPYL ALCOHOL solution

IMDG: ISOPROPYL ALCOHOL solution

IATA: ISOPROPYL ALCOHOL solution

**14.3 Transport hazard class(es)**

ADR/RID/ADN: 3

IMDG: 3

IATA: 3

**14.4 Packing group**

ADR/RID/ADN: II

IMDG: II

IATA: II

**14.5 Environmental hazard**

Marine Pollutant: Not expected

**Additional information:**

ADR/RID/ADN: Limited Quantity Exemption

IATA: Limited Quantity Exemption

IMDG: Emergency schedules F-A, S-P  
Limited Quantity Exemption

**14.6 Special precautions for user**

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Maritime transport in bulk according to IMO instruments**

Not applicable

**Section 15: REGULATORY INFORMATION****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

This safety datasheet complies with the requirements of:

EU Commission Regulation (EU) 2020/878 (REACH)

EU Regulation (EC) No 1272/2008 (CLP)

GB Regulation GB CLP

EINECS: All components in this product are listed on the European Inventory of Existing Chemical Substance

**Annex XIV - List of substances subject to authorisation**

Intrinsic property	Ingredient Name	Status	Reference number	Date of revision
<b>Plug 4</b> Substance of equivalent concern for environment	Poly(oxy-1,2-ethanediyl), $\alpha$ -[(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy-	Listed	42	Sunset date 2021-01-04 – IVD exempted as SR&D activity
<b>Wash 1</b> Substance of equivalent concern for environment	Poly(oxy-1,2-ethanediyl), $\alpha$ -[(1,1,3,3-tetramethylbutyl)phenyl]- $\omega$ -hydroxy-	Listed	42	Sunset date 2021-01-04 – IVD exempted as SR&D activity

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out on this product.

**Section 16: OTHER INFORMATION****Full text of H and P-Statements referred to under sections 2 and 3.**

Flam Liq	Flammable Liquid
Acute Tox	Acute Toxicity
Skin Corr	Skin Corrosion
Skin Irrit	Skin Irritation
Eye Irrit	Eye Irritation
Eye Dam	Eye damage
STOT SE	Specific Target Organ Toxicity Single Exposure
Aquatic chronic	Aquatic long term chronic exposure
H225	Highly flammable liquid and vapour
H302+H312+H332	Harmful if swallowed, in contact with skin or if inhaled.
H314	Causes severe skin burns and eye damage
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness
H412	Harmful to aquatic life with long lasting effects
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P235	Keep cool.
P240	Ground and bond container and receiving equipment.
P241	Use explosion-proof [electrical/ventilating/ lighting] equipment.
P242	Use non-sparking tools.
P243	Take action to prevent static discharges
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P261	Avoid breathing dust/fume/gas/mist/ vapours/spray.
P264	Wash thoroughly after handling
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with plenty of water.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor
P312	Call a POISON CENTRE/doctor if you feel unwell.
P321	Specific treatment (see sections 4 to 8 on this SDS and any further information on the label).
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention
P362+P364	Take off contaminated clothing and wash it before reuse
P370+P378	In case of fire: Use water spray (fog), carbon dioxide (CO <sub>2</sub> ), dry chemical powder or foam to extinguish.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up
P501	Dispose of contents/container to a suitable disposal site in accordance with local/regional/national/international regulations

<b><i>Luminex</i></b> <sup>®</sup>	<b>SAFETY DATA SHEET</b>	
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**Training advice:** Before using/handling the product one must read carefully present SDS.

**Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]**

<b>Classification</b>	<b>Justification</b>
<b>Plug 2</b> Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	On basis of test data Calculation method Calculation method
<b>Plug 3</b> Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	On basis of test data Calculation method Calculation method
<b>Plug 4</b> Skin Corr 1C H314 Acute Tox 4, oral, H302 Acute Tox 4, dermal, H312 Eye Dam 1 H318 Acute Tox 4, inhalation, H332 Aquatic chronic 3 H412	Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method
<b>Wash 1</b> Flam. Liq. 2, H225 STOT SE 3, H336 Skin Corr 1C H314 Eye Dam 1 H318	On basis of test data Calculation method Calculation method Calculation method

**Abbreviations and acronyms:**

ADR:	Accord européen sur le transport des marchandises dangereuses par Route (European)
CAS:	Chemical Abstracts Service (division of the American Chemical Society)
CLP:	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DNEL:	Derived No Effect Level
EC50:	Half maximal effective concentration
EINECS:	European Inventory of Existing Commercial Chemical Substances
EU:	European Union
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals
IATA:	International Air Transport Association
IBC:	International Bulk Code
IMDG:	International Maritime Code for Dangerous Goods
IOELV:	Indicative Occupational Exposure Limit Value
LC50:	Lethal concentration, 50 percent
LD50:	Lethal dose, 50 percent
MARPOL:	International Convention for the Prevention of Pollution from Ships
OEL:	Occupational Exposure Level
PBT:	Persistent, Bioaccumulative and Toxic
PNEC:	Predicted No Effect Level
REACH:	Registration, Evaluation, Authorisation and Restriction of Chemicals
SCBA:	Self Contained Breathing Apparatus
SCL:	Specific Concentration Limits
UN:	United Nations
VPvB:	Very Persistent and very Bioaccumulative
WEL:	Workplace Exposure Limit

**Additional information:**

Concentration breakdown for whole mixture:

Plug 1                      100 µl = 5.4%                      Non haz

Plug 2	70 µl = 3.8%	Flam. Liq. 2, H225, Eye Irrit. 2, H319, STOT SE 3, H336
Plug 3	225 µl = 12.2%	Flam. Liq. 2, H225, Eye Irrit. 2, H319, STOT SE 3, H336
Plug 4	500 µl = 27.2%	Skin Corr 1C H314, Acute Tox 4, oral, H302, Acute Tox 4, dermal, H312, Eye Dam 1 H318, Acute Tox 4, inhalation, H332, Aquatic chronic 3 H412
Wash 1	380 µl = 20.7%	Flam. Liq. 2, H225, STOT SE 3, H336, Skin Corr 1C H314, Eye Dam 1 H318
Wash 2	380 µl = 20.7%	Non haz
Elution	165 µl = 9.0%	Non haz
PCR Tube	20 mg (equivalent to 20 µl) = 1.1%	Non haz

Total volume of full kit: 1840 µl

**Document history**

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