


SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878

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

1.1 Product identifier

Product name	Solution A Luminol Enhancer, 200ml; part of 'Amersham™ ECL™ start Western blotting reagent, for 4000 cm² membrane'	
Catalogue Number	RPN3244	 9 0 R P N 3 2 4 4
Component Number	RPN3244V1	
Product description	Not available.	
Product type	Liquid.	
Other means of identification	Not available.	

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

Identified uses
Use in laboratories

1.3 Details of the supplier of the safety data sheet

Supplier	Cytiva Amersham Place Little Chalfont Buckinghamshire HP7 9NA United Kingdom +44 1494 508000	Hours of operation 08.30 - 17.00
	Person who prepared the SDS : sds_author@cytiva.com	
Europe	Cytiva Germany/Europe Munzinger Str. 5 79111 Freiburg Germany t: +49 (0)761 4543 0	1.4 Emergency telephone number +49 (0)761 4543 0

National advisory body/Poison Centre

Europe	https://syntecshop.com/wp-content/uploads/Emergency-Phone-numbers-EU.pdf
---------------	---

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	Mixture
---------------------------	---------

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Repr. 1B, H360FD

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity 4 percent of the mixture consists of component(s) of unknown acute oral toxicity
6 percent of the mixture consists of component(s) of unknown acute dermal toxicity
6 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

Ingredients of unknown ecotoxicity

Contains 4% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms



Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

General Not applicable.


Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Supplemental label elements Safety data sheet available on request.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles  Restricted to professional users.

Special packaging requirements

Containers to be fitted with child-resistant fastenings Not applicable.

Tactile warning of danger Not applicable.

2.3 Other hazards


Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures Mixture

Product/ingredient name	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP]		Type
 ethanediol	REACH #: 01-2119456816-28 EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	1 - 3	Acute Tox. 4, H302	ATE [Oral] = 500 mg/kg	[1] [2]
1,2,4-triazole	EC: 206-022-9 CAS: 288-88-0 Index: 613-111-00-X	0.1 - 1	Acute Tox. 4, H302 Eye Irrit. 2, H319 Repr. 1B, H360FD	ATE [Oral] = 1320 mg/kg	[1]
hydrochloric acid	REACH #: 01-2119484862-27 EC: 231-595-7 CAS: 7647-01-0 Index: 017-002-01-X	0.01	Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335	ATE [Inhalation (gases)] = 1562 ppm Skin Corr. 1B, H314: C ≥ 25% Skin Irrit. 2, H315: 10% ≤ C < 25% Eye Dam. 1, H318: C ≥ 25% Eye Irrit. 2, H319: 10% ≤ C < 25% STOT SE 3, H335: C ≥ 10%	[1] [2]

			See Section 16 for the full text of the H statements declared above.	
--	--	--	--	--

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, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a physical, health or environmental hazard

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	No specific data.
Ingestion	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

5.3 Advice for firefighters

Special precautions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.



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. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

Avoid dispersal 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).

6.3 Methods and material for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Seveso Directive - Reporting thresholds (in tonnes)

Named substances

Name	Notification and MAPP threshold	Safety report threshold
hydrogen chloride	25	250

7.3 Specific end use(s)

Recommendations Research and Development Analytical reagent. Analytical chemistry.

Industrial sector specific solutions Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario (s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
ethanediol	EU OEL (Europe, 1/2022) Absorbed through skin. TWA 8 hours: 20 ppm. TWA 8 hours: 52 mg/m³. STEL 15 minutes: 40 ppm. STEL 15 minutes: 104 mg/m³.
hydrochloric acid	EU OEL (Europe, 1/2022) TWA 8 hours: 5 ppm. TWA 8 hours: 8 mg/m³. STEL 15 minutes: 10 ppm. STEL 15 minutes: 15 mg/m³.



Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Result
ethanediol	<div>DNEL - General population - Long term - Inhalation</div> <div>7 mg/m³</div> <div>Effects: Local</div> <div>DNEL - Workers - Long term - Inhalation</div> <div>35 mg/m³</div> <div>Effects: Local</div> <div>DNEL - General population - Long term - Dermal</div> <div>53 mg/kg bw/day</div> <div>Effects: Systemic</div> <div>DNEL - Workers - Long term - Dermal</div> <div>106 mg/kg bw/day</div> <div>Effects: Systemic</div>
1,2,4-triazole	<div>DNEL - General population - Long term - Oral</div> <div>0.08 mg/kg bw/day</div> <div>Effects: Systemic</div> <div>DNEL - Workers - Long term - Inhalation</div> <div>0.65 mg/m³</div> <div>Effects: Systemic</div> <div>DNEL - Workers - Long term - Dermal</div> <div>5.86 mg/kg bw/day</div> <div>Effects: Systemic</div>
hydrochloric acid	<div>DNEL - General population - Long term - Inhalation</div> <div>8 mg/m³</div> <div>Effects: Local</div> <div>DNEL - Workers - Long term - Inhalation</div> <div>8 mg/m³</div> <div>Effects: Local</div> <div>DNEL - General population - Short term - Inhalation</div> <div>15 mg/m³</div> <div>Effects: Local</div> <div>DNEL - Workers - Short term - Inhalation</div> <div>15 mg/m³</div> <div>Effects: Local</div>

PNECs

Not available.

8.2 Exposure controls

Appropriate engineering controls

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance			
Physical state	Liquid.		
Colour	Clear. Colourless.		
Odour	Not available.		
Odour threshold	Not available.		
Melting point/freezing point	Not available.		
Boiling point or initial boiling point and boiling range	Not available.		
Flammability	Not available.		
Lower and upper explosion limit	Not available.		
Flash point	Not applicable.		
Auto-ignition temperature	Not available.		
Ingredient name	°C	Method	
ethanediol	398		
Decomposition temperature	Not available.		
pH	9.4 [Conc. (% w/w): 100%]		
Viscosity	Not available.		
Solubility			
Media	Result		
cold water	Easily soluble		
hot water	Easily soluble		
Solubility in water	Not available.		
Partition coefficient: n-octanol/ water	Not available.		
Vapour pressure	Not available.		
	Vapour Pressure at 20°C		Vapour pressure at 50°C
Ingredient name	mm Hg	kPa	Method
water	17.5	2.3	
ethanediol	0.09226	0.012	
Relative density	Not available.		
Relative vapour density	Not available.		
Particle characteristics			
Median particle size	Not applicable.		

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Burning time	Not applicable.
Burning rate	Not applicable.
Explosive properties	Not available.




Oxidising properties	Not available.
9.2.2 Other safety characteristics	
Evaporation rate	Not available.
Not applicable.	

SECTION 10: Stability and reactivity


10.1 Reactivity	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	The product is stable.
10.3 Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	No specific data.
10.5 Incompatible materials	No specific data.
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

Product/ingredient name	Result
 ethanediol	Rat - Oral - LD50 4700 mg/kg
1,2,4-triazole	Rat - Dermal - LD50 3129 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Respiratory depression
	Rat - Oral - LD50 1375 mg/kg <u>Toxic effects:</u> Behavioral - Somnolence (general depressed activity) Lung, Thorax, or Respiration - Respiratory depression
hydrochloric acid	Rat - Inhalation - LC50 Gas. 3124 ppm [1 hours] <u>Toxic effects:</u> Olfaction - Other changes Eye - Iritis
Conclusion/Summary [Product]	Not available.


Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
 Solution A Luminol Enhancer, 200ml; part of 'Amersham ECL start Western blotting reagent, for 4000 cm2 membrane'	25000	N/A	N/A	N/A	N/A
ethanediol	500	N/A	N/A	N/A	N/A
1,2,4-triazole	1320	3129	N/A	N/A	N/A
hydrochloric acid	N/A	N/A	1562	N/A	N/A

Skin corrosion/irritation

Product/ingredient name	Result
 1,2,4-triazole	Rabbit - Skin - Mild irritant <u>Amount/concentration applied:</u> 0.5 gm
Conclusion/Summary [Product]	Not available.

Serious eye damage/eye irritation

Product/ingredient name	Result
 1,2,4-triazole	Rabbit - Eyes - Severe irritant <u>Amount/concentration applied:</u> 50 mg
	Rabbit - Eyes - Severe irritant <u>Amount/concentration applied:</u> 100 mg
Conclusion/Summary [Product]	Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] Not available.

Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary [Product] Not available.

Respiratory

Conclusion/Summary [Product] Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] Not available.

Carcinogenicity

Not available.

Conclusion/Summary [Product] Not available.

Reproductive toxicity

Not available.

Conclusion/Summary [Product] Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Result
Hydrochloric acid	STOT SE 3, H335 (Respiratory tract irritation)

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation	Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Eye contact	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	No specific data.
Ingestion	No specific data.
Skin contact	No specific data.
Eye contact	No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects	Not available.
Potential delayed effects	Not available.

Long term exposure

Potential immediate effects	Not available.
Potential delayed effects	Not available.

Potential chronic health effects



Conclusion/Summary [Product]	Not available.
General	No known significant effects or critical hazards.
Carcinogenicity	No known significant effects or critical hazards.
Mutagenicity	No known significant effects or critical hazards.
Reproductive toxicity	May damage fertility. May damage the unborn child.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product] The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name

ethanediol

Result

Acute - LC50 - Fresh water

Fish - Fathead minnow - *Pimephales promelas*
Age: ≤7 days
8050 mg/l [96 hours]
Effect: Mortality

Acute - LC50 - Fresh water

Crustaceans - Water flea - *Ceriodaphnia dubia* - Neonate
6900 mg/l [48 hours]
Effect: Mortality

1,2,4-triazole

Acute - LC50 - Fresh water

US EPA
Fish - Rainbow trout,donaldson trout - *Oncorhynchus mykiss*
Weight: 1.27 g
498 ppm [96 hours]
Effect: Mortality

hydrochloric acid

Acute - LC50 - Marine water

Crustaceans - Green crab - *Carcinus maenas* - Adult
240 mg/l [48 hours]
Effect: Mortality

Acute - LC50 - Fresh water

Fish - Western mosquitofish - *Gambusia affinis* - Adult
282 ppm [96 hours]
Effect: Mortality

Conclusion/Summary [Product] Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] Not available.

Product/ingredient name

ethanediol

Aquatic half-life

-

Photolysis

-

Biodegradability

Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
ethanediol	-1.36	10	Low

12.4 Mobility in soil

Soil/water partition coefficient

Product/ingredient name

ethanediol

1,2,4-triazole

logK_{oc}

0.75

0.92

K_{oc}

5.59292

8.29609

Results of PMT and vPvM assessment

Product/ingredient name

PMT

P

M

T

vPvM

vP

vM



Ethanediol	No	N/A	Yes	No	N/A	N/A	Yes
1,2,4-triazole	N/A	N/A	Yes	Yes	N/A	N/A	Yes
hydrochloric acid	No	No	No	No	No	No	No
Mobility	Not available.						
Conclusion/Summary	The product does not meet the criteria to be considered as a PMT or vPvM.						

12.5 Results of PBT and vPvB assessment

Regulation (EC) No. 1907/2006 [REACH]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Ethanediol	No	N/A	No	No	No	N/A	No
1,2,4-triazole	No	N/A	No	Yes	No	N/A	No
hydrochloric acid	No	No	No	No	No	No	No

Regulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
Ethanediol	No	N/A	No	No	No	N/A	No
1,2,4-triazole	No	N/A	No	Yes	No	N/A	No
hydrochloric acid	No	No	No	No	No	No	No

Conclusion/Summary The product does not meet the criteria to be considered as a PBT or vPvB.

Regulation (EC) No. 1272/2008 [CLP]

12.6 Endocrine disrupting properties

Not applicable.

Conclusion/Summary [Product] The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times 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	Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

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 when recycling is not feasible.
Special precautions	This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.



Additional information	-	-	-	-
------------------------	---	---	---	---

- 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 Transport in bulk according to IMO instruments

Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV


None of the components are listed.

Substances of very high concern


None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product/ingredient name	%	Designation [Usage]
Solution A Luminol Enhancer, 200ml; part of 'Amersham ECL start Western blotting reagent, for 4000 cm2 membrane'	≥90	3
		30
1,2,4-triazole	<1	30

Labelling  Restricted to professional users.

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air	Not listed
Industrial emissions (integrated pollution prevention and control) - Water	Not listed
Explosive precursors	 Not applicable.

Ozone depleting substances (EU 2024/590)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is controlled under the Seveso Directive.

Named substances

Name
hydrogen chloride

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)


Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Inventory list

United States	Not determined.
Canada inventory	Not determined.
China	Not determined.
Japan	Not determined.
15.2 Chemical safety assessment	This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

 Indicates information that has changed from previously issued version.

Abbreviations and acronyms	ATE = Acute Toxicity Estimate
	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
	DMEL = Derived Minimal Effect Level
	DNEL = Derived No Effect Level
	EUH statement = CLP-specific Hazard statement
	N/A = Not available
	PBT = Persistent, Bioaccumulative and Toxic
	PNEC = Predicted No Effect Concentration
	RRN = REACH Registration Number
	vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
Repr. 1B, H360FD	Calculation method

Full text of abbreviated H statements	H302	Harmful if swallowed.
	H315	Causes skin irritation.
	H319	Causes serious eye irritation.
Full text of classifications [CLP/GHS]	Acute Tox. 4, H302	ACUTE TOXICITY: ORAL - Category 4
	Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
	Skin Irrit. 2, H315	SKIN CORROSION/IRRITATION - Category 2
Date of printing	17 February 2026	
Date of issue/ Date of revision	17 February 2026	
Date of previous issue	27 November 2023	
Version	4.01	

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

