



SAFETY DATA SHEET

Lightning-Link® Modifier AP

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name Lightning-Link® Modifier AP
Product No. 790-0003

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

Identified uses Chemical reagent

1.3. Details of the supplier of the safety data sheet

Supplier Innova Biosciences Ltd.
Babraham Hall
Babraham
Cambridge
CB22 3AT
Tel. +44(0) 1223 496170
Fax. +44(0) 1223 496172
info@innovabiosciences.com

1.4. Emergency telephone number

+44 (0) 1223 496170 (Mon-Fri, 09:00-17:00, UK Time)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Not classified.

Classification (1999/45/EEC)

Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Label in Accordance With (EC) No. 1272/2008

No pictogram required.

2.3. Other hazards

This product does not contain any PBT or vPvB substances.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ZINC CHLORIDE

< 1%

CAS-No.: 7646-85-7

EC No.: 231-592-0

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Classification (EC 1272/2008)
Acute Tox. 4 - H302
Skin Corr. 1B - H314
STOT SE 3 - H335
Aquatic Acute 1 - H400
Aquatic Chronic 1 - H410

Classification (67/548/EEC)
C;R34
Xn;R22
N;R50/53

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Composition Comments

This product does not contain any hazardous ingredients, or ingredients with national workplace exposure limits. None of the ingredients are required to be listed.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Move the exposed person to fresh air at once. Rinse nose and mouth with water. Get medical attention if any discomfort continues.

Ingestion

Immediately rinse mouth and provide fresh air. Get medical attention if any discomfort continues.

Skin contact

Remove affected person from source of contamination. Wash the skin immediately with soap and water. Get medical attention if any discomfort continues.

Eye contact

Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation.

No specific symptoms noted.

Ingestion

No specific symptoms noted.

Skin contact

No specific symptoms noted.

Eye contact

No specific symptoms noted.

4.3. Indication of any immediate medical attention and special treatment needed

No specific first aid measures noted. Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

There are no anticipated hazardous decomposition products associated with this material.

Unusual Fire & Explosion Hazards

No unusual fire or explosion hazards noted.

5.3. Advice for firefighters

Special Fire Fighting Procedures

No specific fire fighting procedure given.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

For personal protection, see section 8.

6.2. Environmental precautions

Not relevant considering the small amounts used.

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6.3. Methods and material for containment and cleaning up

Non-hazardous substance.

6.4. Reference to other sections

For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

No specific usage precautions noted. Avoid spilling, skin and eye contact.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store at - 20°C or + 4°C

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA - 8 Hrs		STEL - 15 Min		Notes
ZINC CHLORIDE	WEL		1 mg/m3		2 mg/m3	

WEL = Workplace Exposure Limit.

Ingredient Comments

No exposure limits noted for ingredient(s).

8.2. Exposure controls

Protective equipment



Engineering measures

No specific ventilation requirements noted, except this product must not be used in a confined space without good ventilation.

Respiratory equipment

No specific recommendations.

Hand protection

No specific hand protection noted, but gloves may still be advisable.

Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Hygiene measures

When using do not eat, drink or smoke. Wash hands at the end of each work shift and before eating, smoking and using the toilet.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Odourless.
Solubility	Soluble in water.
Initial boiling point and boiling range	
	Not available.
Melting point (°C)	
	Not available.

Relative density

Not available.

Vapour density (air=1)

Not applicable.

Vapour pressure

Not applicable.

Evaporation rate

Not available.

pH-Value, Conc. Solution

Not available.

Viscosity

Not available.

Decomposition temperature (°C)

Not available.

Odour Threshold, Lower

Not applicable.

Flash point

Not applicable.

Auto Ignition Temperature (°C)

Not applicable.

Flammability Limit - Lower(%)

Not applicable.

Flammability Limit - Upper(%)

Not applicable.

**Partition Coefficient
(N-Octanol/Water)**

Not available.

Explosive properties

Not available.

Oxidising properties

Not available.

9.2. Other information

No information required.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials**Materials To Avoid**

No specific, or groups of materials are likely to react to produce a hazardous situation.

10.6. Hazardous decomposition products

None under normal conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

Not relevant

Inhalation

May be harmful if inhaled. May cause irritation to the respiratory system.

Ingestion

May be harmful if swallowed

Skin contact

May cause skin irritation/eczema.

Eye contact

May cause temporary eye irritation.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment.

12.1. Toxicity

Not applicable.

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation.

Partition coefficient

Not available.

12.4. Mobility in soil

Mobility:

The product is soluble in water.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

Road Transport Notes Not Classified

Rail Transport Notes Not classified.

Sea Transport Notes Not classified.

Air Transport Notes Not classified.

14.1. UN number

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Not classified for transportation.

14.2. UN proper shipping name

Not classified for transportation.

14.3. Transport hazard class(es)

Not classified for transportation.

14.4. Packing group

Not classified for transportation.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not classified for transportation.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Revision Date 11/01/2013

Revision 2

Supersedes date 30/08/2012

Risk Phrases In Full

R34 Causes burns.

R22 Harmful if swallowed.

R37 Irritating to respiratory system.

NC Not classified.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Hazard Statements In Full

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.