



**SAFETY DATA SHEET**  
**Thunder-Link® PLUS Oligo Activation Reagent**

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

**1.1. Product identifier**

**Product name** Thunder-Link® PLUS Oligo Activation Reagent  
**Product No.** 425-0001

**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.

**Supplemental label information**

EUH210

Safety data sheet available on request.

**2.3. Other hazards**

This product does not contain any PBT or vPvB substances.

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

**3.2. Mixtures**

Succinimidyl 4-(N-maleimidomethyl)cyclohexane-1-carboxylate

10-30%

CAS-No.: 92921-24-9

EC No.:

# Thunder-Link® PLUS Oligo Activation Reagent

Classification (EC 1272/2008)  
Skin Irrit. 2 - H315  
Eye Irrit. 2 - H319  
STOT SE 3 - H335

Classification (67/548/EEC)  
Xi;R36/37/38.

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.

### 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**

Store at -20°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**

**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** Freeze dried solid

**Colour** White.

**Odour** Odourless.

**Solubility** Soluble in water.

**Initial boiling point and boiling range (°C)**

No information required.

**Melting point (°C)**

No information required.

**Relative density**

Not relevant

**Vapour density (air=1)**

Not applicable.

**Vapour pressure**

Not applicable.

**Evaporation rate**

Not applicable.

# Thunder-Link® PLUS Oligo Activation Reagent

## pH-Value, Conc. Solution

Not applicable.

## Viscosity

Not applicable.

## Solubility Value (G/100G H2O@20°C)

Not available.

## Decomposition temperature (°C)

Not available.

## Odour Threshold, Lower

Not applicable.

## Flash point (°C)

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 applicable.

## Oxidising properties

Not applicable.

## 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

Dust in high concentrations may irritate the respiratory system.

#### Ingestion

May cause discomfort if swallowed.

**Skin contact**

Powder may irritate skin.

**Eye contact**

Particles in the eyes may cause irritation and smarting.

**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**

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**

# Thunder-Link® PLUS Oligo Activation Reagent

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	15/12/15
Revision	1
<b>Risk Phrases In Full</b>	
R36/37/38	Irritating to eyes, respiratory system and skin.
NC	Not classified.
<b>Hazard Statements In Full</b>	
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

#### 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.