

Safety Data Sheet

Section 1: Identification

Product identifier

Product Name: LL-37, scrambled

Product Code: RP20332

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

Recommended use: Hazard Communication & Compliance

Details of the supplier of the safety data sheet

Manufacturer: GenScript
860 Centennial Ave.
Piscataway, NJ 08854 United States

www.genscript.com

product@genscript.com

Telephone (General): 1-732-885-9188

Emergency telephone number

Manufacturer: 1-877-436-7274

Section 2: Hazards identification

According to OSHA 29 CFR 1910.1200 HCS

Emergency Overview: Lyophilized solid. Toxicological properties of components have not been fully investigated.

Health Effects: Not classified

Inhalation: Not known to present an inhalation hazard under normal use.

Skin: May cause skin irritation

Eyes: May cause serious eye irritation

Ingestion: May be harmful if swallowed.

Chronic Effects/Target Organ Effects: None known.

Medical Conditions Aggravated By Exposure: None known.

Environmental Effects: None known.

Section 3 - Composition/Information on Ingredients

Chemical characterization: Substances

Description: Chemical synthesized peptide

Section 4: First-Aid Measures

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| Inhalation | Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek immediate medical advice. |
| Skin | Immediately wash with plenty of water and soap and rinse thoroughly. Seek immediate medical advice. |
| Eye | Rinse opened eye for several minutes under running water. Remove contact lenses, if present and easy to do. Continue rinsing. Then consult a doctor. |
| Swallowing | Seek immediate medical treatment. |

Section 5: Fire-Fighting Measures

Suitable Extinguishing Media: Carbon dioxide (CO₂), extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Special protective equipment for firefighters

Standard procedure for chemical fires.

Section 6 - Accidental Release Measures

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| Personal Precautions | Always wear recommended Personal Protective Equipment. Use personal protection equipment. Keep unprotected persons away. Ensure adequate ventilation. |
| Methods for cleaning up | Soak up with inert absorbent material. |
| Environmental precautions | Do not allow material to be released to the environment without proper governmental permit. |
| Methods and material for containment and cleaning up | Pick up mechanically. |
| Prevention of secondary hazards | No special measures required. |

Section 7 - Handling and Storage

Handling: Always wear recommended Personal Protective Equipment. No special handling advices are necessary. Keep container tightly sealed.

Storage: Store in freezer(-20°C). Store away from oxidizing agents. Protect from heat. Keep container tightly sealed.

Specific end use(s): For R&D/experimental use only

Section 8 - Exposure Controls/Personal Protection

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with limit values that require monitoring at the workplace: The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Exposure Controls

Personal protective equipment

General protective and hygienic measures: The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work. Maintain an ergonomically appropriated working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Protection of hands: Impervious gloves. Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Penetration time of glove material (in minutes): Not determined.

Eye Protection: Chemical goggles or safety glasses.

Body Protection: Protective work clothing.

Section 9 - Physical and Chemical Properties

General information

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|--------------------------------------|--------------------------|
| Form | Lyophilized solid |
| Appearance | White or off-white color |
| Odor | No data available |
| Odor Threshold | No data available |
| Boiling point / boiling range | No data available |
| Melting point / melting range | No data available |
| Flash point: | No data available |
| Autoignition Temperature | No data available |

| | |
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| Oxidizing properties | No data available |
| Water solubility | No data available |
| Explosion limit | Not determined |
| Evaporation rate | No data available |
| Partition coefficient(n-octanol/water) | Not determined |
| Viscosity dynamic | No data available |
| Viscosity kinematic | No data available |

Section 10: Stability and Reactivity

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| Reactivity | No additional information available |
| Chemical stability | Stable under recommended storage conditions |
| Possibility of hazardous reactions | Not dangerous reactions known. |
| Conditions to avoid | No data available |
| Incompatible materials | No data available |
| Hazardous decomposition products | No data available |

Section 11 - Toxicological Information

Information on toxicological effects

Acute Toxicity: The Registry of Toxic Effects of Chemical Substance (RTECS) contains acute toxicity data for components in this product.

LD/LC50 values that are relevant for classification: No data

Principle Routes of Exposure Potential Health Effects

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| Eyes | May cause eye irritation with susceptible persons. |
| Skin | May cause skin irritation in susceptible persons. |
| Inhalation | May be harmful by inhalation. |
| Ingestion | May be harmful if swallowed. |

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| Carcinogenic effects | No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA, or ACGIH. |
| Mutagenic effects | No effects known. |
| Reproductive toxicity | No effects known. |
| Sensitization | No sensitizing effects known. |
| Additional toxicological information | To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. |

Section 12 - Ecological Information

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| Aquatic toxicity | No further relevant information available. |
| Mobility in soil | No further relevant information available. |
| Bioaccumulative potential | No further relevant information available. |
| Persistence and degradability | No further relevant information available. |
| General notes | <p>Do not allow material to be released to the environment without proper governmental permits.</p> <p>Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.</p> <p>Avoid transfer into the environment.</p> |
| Results of PBT and vPvB assessment | Not applicable |

Section 13 - Disposal Considerations

Waste treatment methods

Recommendation: Consult state, local or national regulations to ensure proper disposal.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

Section 14 - Transport Information

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| UN-Number / DOT, ADN, IMDG, IATA | Not applicable |
| UN proper shipping name / DOT, ADN, IMDG, IATA | Not applicable |

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| Transport hazard class(es) / DOT, ADR, AND, IMDG, IATA Class | Not applicable |
| Packing group / DOT, IMDG, IATA | Not applicable |
| Environmental hazards: | Not applicable |
| Special precautions for user | Not applicable |
| Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code | Not applicable |
| Transport/Additional information: | |
| DOT | Not applicable |
| Marine Pollutant (DOT): | |
| UN "Model Regulation" | Not applicable |

Section 15 - Regulatory Information

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

GHS label element: Not applicable

Hazard pictograms: Not applicable

Signal word: Not applicable

Hazard statements: Not applicable

National regulations: This product is not listed in the US. Environmental Protection Agency Toxic Substances Control Act Chemical Substance Inventory. Use of this product is restricted to research and development only. This product must be used by or directly under the supervision of a technically qualified individual as defined by TSCA. This product must not be used for commercial purposes or in formulations for commercial purposes.

SARA Section 313 (specific toxic chemical listings): Substance is not listed.

California Proposition 65

Prop 65 - Chemical known to cause cancer: Substance is not listed.

Prop 65 - Developmental toxicity: Substance is not listed.

Prop 65 - Developmental toxicity, female: Substance is not listed.

Prop 65 - Developmental toxicity, male: Substance is not listed.

Information about limitation of use: For use only by technically qualified individuals

Other regulations, limitations and prohibitive regulations

Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.

The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the marker and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use): Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

Section 16 - Other Information

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| Date Created | 05/20/2016 |
| Date Updated | 03/20/2018 |
| Version | 1.2 |
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