

Creation Date: 2018/10/22 Revision Date: 2018/10/22

1. Identification	
Product identifier	
Product name	LuminolPen™ EZ, HRP System
Product number	LH05-10 / LH05-50
Recommended use	Biochemical reagent for research use only
Details of the supplier of the safety	
data sheet	
Manufacture / Supplier	Energenesis Biomedical Co., Ltd.
Address	6F-3, No.21, Ln. 583, Ruiguang Rd., Neihu Dist.
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2. Hazard(s) identification	
Classification of the substance or mixture	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 [CLP]
Label elements	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 [CLP]
Other hazards	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.

3. Composition/information on ingredients

No components need to be disclosed according to the applicable regulations

4. First aid measures	
Description of first aid measures	
Eye Contact	Flush eyes with plenty of water for at least 20 minutes retracting eyelids often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Remove contact lenses, clean before re-use. Get immediate medical attention.
Inhalation	Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.
Skin Contact	Wash with soap and water. Remove contaminated clothing and launder immediately, and discard contaminated leather goods, and wash before re-use. Get medical attention immediately if irritation develops or persists.
Ingestion	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has

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	been swallowed and the exposed person is conscious, give small quantities of water or milk to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention immediately.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.
Indication of any immediate medical attention and special treatment needed	No data available
5. Firefighting measures	
Extinguishing media	
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Special hazards arising from the substance or mixture	No data available
Advice for fire-fighters	Wear self-contained breathing apparatus for firefighting if necessary.
6. Accidental release measures	
	Many rearrivatory protection. Avoid broathing venouse mist or
Personal precautions, protective equipment and emergency procedures	Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and material for containment and cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.
7. Handling and storage	
Precautions for safe handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. For precautions see section 2.
Conditions for safe storage, including any incompatibilities	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Recommended storage temperature: -20 °C
Specific end use(s)	Apart from the uses mentioned in section 1 no other specific uses are stipulated.



Control parameters	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Exposure controls	
Appropriate engineering controls	Handle in accordance with good industrial hygiene and safety practice.
Personal protective equipment	
Eye protection	Wear chemical safety goggles. An eye wash station must be available where this product is used.
Skin and body protection	Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
Respiratory protection	A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
Hand protection	Wear chemically resistant gloves, Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Have a safety shower available.

9. Physical and chemical properties	
Information on basic physical and chemical properties	
Appearance	Form: liquid Color: yellow
Odour	No data available
Odour Threshold	No data available
рН	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Lower and upper explosive (flammable) limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	No data available
Solubility in water	No data available
Partition coefficient: n-octanol/ water (log Kow)	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available

10. Stability and reactivity	
Reactivity	No data available
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.



Conditions to avoid	No data available
Incompatible materials	Strong bases, Powdered metals
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. Toxicological information	
Information on toxicological	No data available
effects	
Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	No data available

12. Ecological information	
Toxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
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.
Other adverse effects	No data available
13. Disposal considerations	
Waste treatment methods	
Product	Offer surplus and non-recyclable solutions to a licensed disposal company.

Dispose of as unused product. Contaminated packaging



14. Transport information	
IATA / ADR / RID / IMDG	Classified as dangerous in the meaning of transport regulations.
UN number	_
UN proper shipping name	Not dangerous goods
Transport hazard class(es)	_
Packaging group	_
Environmental hazards	no
Special precautions for user	No data available
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	No data available

15. Regulatory information	
Safety, health and environmental regulations/legislation specific for the substance or mixture	This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.
Chemical safety assessment	No data available

16. Other information	
Abbreviations	
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
BEIs	Biological exposure indices
IMDG	International Maritime Dangerous Goods
ΙΑΤΑ	International Air Transport Association-Dangerous Goods Regulations
CAS	Chemical Abstracts Service (division of the American Chemical Society)
LD50	Lethal dose, 50 percent
OSHA	Occupational Health and Safety Administration
PEL	Permissible Exposure Limit
RID	Regulations Concerning the International Carriage of Dangerous Godds by Rail
STEL	Short Term Exposure Limit
TWA	Time Weighted Average
Further information	Copyright 2019 Energenesis Biomedical Co., Ltd License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Energenesis Biomedical Corporation shall not be held liable for any damage resulting from handling or from contact with the above product.