

SECTION 1

Identification of the substance/mixture and of the company/undertaking

Product Information

Product Name	Supershield EPL 100
INCI Name	Polyepsilon-lysine (Poly-ε-Lysine)
CAS No.	28211-04-3

Manufacturer Information

MAHA (CHINA) NEW MATERIAL TECHNOLOGY CO. LTD.
Room 1104, Blk 10, Jingmao Royal House, Hangdu Avenue Section 4 No. 111, Shuangliu District,
Chengdu, SiChuan Province, P.R.China

Emergency Telephone Number

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SECTION 2

Hazards identification

Classification of the substance or mixture

Polyepsilon-lysine (Poly-ε-Lysine) was found to be non-toxic at high levels in acute animal studies and was not mutagenic in bacterial reversion assays. Polyepsilon-lysine (Poly-ε-Lysine) was approved as "Generally Recognized as Safe" (GRAS No. GRN000315) by the US FDA in 2003.

Classification according to EC regulation 1272/2008 (CLP)

Not classified. This product is not classified as dangerous according to the CLP Regulation (EC) No 1272/2008.

Label elements

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Labelling (CLP)**Pictogram**

Not applicable.

Signal word

Not applicable.

Hazard statements

Not applicable.

Precautionary statements

Not applicable.

Other hazards

Not applicable.

SECTION 3***Composition/Information on ingredients***

Component	Content	CAS No.
Polyepsilon-lysine (Poly-ε-Lysine)	≥ 95.0%	28211-04-3
Ash	≤ 3.0%	-
Lead	≤ 1 mg/kg	-
Arsenic	≤ 1 mg/kg	-

SECTION 4

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First aid measures

Description of first aid measures

Inhalation	Move victim to fresh air if discomfort is felt.
Skin contact	Wash with soap and water if necessary.
Eye contact	Rinse with plenty of water.
Ingestion	No treatment is necessary under normal circumstances. If symptoms occur seek medical advice.

SECTION 5

Fire-fighting measures

Extinguishing media

Suitable extinguishing media Dry powder, carbon dioxide, foam or water fog.

Extinguishing media which must not be used for safety reasons Water jet.

Special hazards arising from the substance or mixture

Combustible. In case of fire may be liberated: Traces of incompletely burned carbon compounds, carbon monoxide and carbon dioxide.

Advice for firefighters

Treat as burning melted fat.

SECTION 6

Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

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Environmental Precautions

No data available.

Methods and materials for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Clean thoroughly with suitable detergent. After cleaning, flush away traces with water.

SECTION 7***Handling and storage*****Handling**

Take moisture-proof measure. Prevent sleeting drench attacks. Ensure adequate ventilation. Avoid dust formation in confined areas.

Storage

Store in cool (0-20°C), dry conditions, away from direct sunlight in original unopened packs.

SECTION 8***Exposure controls/personal protection*****Exposure standards**

Not applicable.

Exposure controls

Not applicable.

Personal protection equipment

Use personal protective equipment.

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SECTION 9
Physical and chemical properties
Information on basic physical and chemical properties

a) Appearance	White to creamy yellow powder
b) Physical state	Highly hygroscopic
c) Odour	No data available
d) Odour threshold	No data available
e) pH (1% Aqueous Solution)	4.0 – 6.5
f) Solubility	Soluble in water
g) Molecular weight	4700 Da (degree of polymerization = 30)
h) Melting point	172.8°C
i) Flash point/flash point range	No data available
j) Evaporation rate	No data available
k) Flammability	No data available
l) Explosion limits	No data available
m) Vapour pressure	No data available
n) Vapour density	No data available
o) Density	No data available
p) Partition coefficient: n-octanol/ water	No data available
q) Auto-ignition temperature	No data available
r) Decomposition temperature	No data available
s) Viscosity, dynamic	No data available
t) Explosive properties	No data available

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u) Oxidizing characteristics

No data available

SECTION 10

Stability and reactivity

Reactivity

No dangerous reactions with proper and storage and handling.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

None.

Conditions to avoid

Protect from heat and direct sunlight.

Incompatible materials

None.

Hazardous decomposition products

None.

SECTION 11

Toxicological information

Toxicological effects

No toxic effects are known under normal conditions from inhalation of dust or vapours from this product.

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SECTION 12***Ecological information*****Toxicity**

Polyepsilon-lysine (Poly-ε-Lysine) is believed not to be dangerous to the environment with respect to mobility, persistency and degradability, bioaccumulative potential, aquatic toxicity and other data relating to ecotoxicity.

SECTION 13***Disposal considerations*****Waste treatment methods****Product**

Dispose of waste according to applicable legislation.

Contaminated packaging

Dispose of waste according to applicable legislation.

SECTION 14***Transport information***

UN number		
ADR/RID: -	IMDG: -	IATA: -
UN proper shipping name		
ADR/RID: Not regulated		
IMDG: Not regulated		
IATA: Not regulated		
Transport hazard class(es)		
ADR/RID: -	IMDG: -	IATA: -
Packaging group		

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ADR/RID: -	IMDG: -	IATA: -
Environmental hazards		
Marine pollutant: -		
Special precautions for user		
None. Not classified as dangerous goods according to FDA and WHO.		
Transport in bulk according to Annex II of Marpol and the IBC Code		
No data available.		

SECTION 15

Regulatory information

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

Not applicable.

Chemical safety assessment

Not applicable.

SECTION 16

Other information

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