

Section 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Identity rProtein A Seplife® Suno
Unique Formula Identifier

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

Intended Uses and Uses Advised Against Ion Exchange, Adsorbent, and/or catalyst.

1.3. Details of the supplier of the safety data sheet

Company Name Sunresin New Materials Co. Ltd.
No.135, Jinye Road, Xi'an Hi-tech Industrial Development Zone,
Shaanxi, 710076, China
Customer Service 0086-29-86691600
Email Address info.lifescience@sunresin.com

1.4. Emergency telephone number

24 hour Emergency Telephone No. 0086-29-86691600

Section 2. Hazard identification of the product

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flammable Liquid, category 3;H226 Flammable liquid and vapor.

2.2. Label elements

According to REGULATION (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006



Warning

H226 Flammable liquid and vapor.

P210 Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

P501 Dispose of contents or container in accordance with local and national regulations.

P240 Ground, bond container and receiving equipment.

P241 Use explosion-proof electrical, ventilating, light, equipment.

P242 Use only non-sparking tools.

P243 Take action to prevent static discharges.

2.3. Other hazards

This product contains no PBT/vPvB/vPvM chemicals.

This product contains no endocrine disrupting chemicals.

Section 3. Composition/information on ingredients

3.2. Mixtures

If the product contains substances that present a hazard according to Regulation (EC) No. 1272/2008 [CLP/GHS], they are listed below.

Ingredient/Chemical Designations	Weight %	EC No. 1272/2008 Classification	Notes
Ethanol CAS Number: 64-17-5 EC No. 200-578-6 Index No.: 603-002-00-5 REACH #: 01-2119457610-43	14- 19	Flammable Liquid, category 2;H225	

Reference EC No. 1272/2008 1.1.3.1. Notes relating to the identification, classification and labelling of substances (Table 3.1).

*PBT/vPvB - PBT, vPvM or vPvB-substance.

The full texts of the phrases are shown in Section 16.

Section 4. First aid measures

4.1. Description of first aid measures

- General** In all cases of doubt, or when symptoms persist, seek medical attention.
Never give anything by mouth to an unconscious person.
- Inhalation** Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.
- Eye** Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.
- Skin** Remove contaminated clothing. Wash skin thoroughly with soap and water or use a recognized skin cleanser.
- Ingestion** If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Overview No chronic toxicity or long term toxicity information available. Treat symptomatically. Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage. See section 2 for further details.

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

Notes to physician Treat symptomatically. IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.

Section 5. Fire-fighting measures

5.1. Extinguishing media

Recommended extinguishing media; alcohol resistant foam, CO₂, powder, water spray.
Unsuitable extinguishing media: Do not use; water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: No hazardous decomposition data available.
Keep away from heat, sparks, open flames, and other ignition sources - No smoking.

Keep container tightly closed.
Keep cool.
Ground, bond container and receiving equipment.
Use explosion-proof electrical, ventilating, light, equipment.
Use only non-sparking tools.
Take action to prevent static discharges.

5.3. Advice for fire-fighters

As with all fires, wear positive pressure, self-contained breathing apparatus, (SCBA) with a full face piece and protective clothing. Persons without respiratory protection should leave area.
Wear SCBA during clean-up immediately after fire. No smoking.

Section 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions

Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.
Dispose of contents or container in accordance with local and national regulations.

6.3. Methods and material for containment and cleaning up

Ventilate the area and avoid breathing vapors. Take the personal protective measures listed in section 8.
Contain and absorb spillage with non-combustible materials e.g. sand, earth, and vermiculite.
Place in closed containers outside buildings and dispose of according to the Waste Regulations.

6.4 Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

Section 7. Handling and storage

7.1. Precautions for safe handling

Handle containers carefully to prevent damage and spillage.
Wear protective gloves, eye protection, and face protection.

7.2. Conditions for safe storage, including any incompatibilities

Incompatible materials: No available information
Store in a well ventilated place. Keep cool.

7.3. Specific end use(s)

No available information

Section 8. Exposure controls / personal protection

8.1. Control parameters

Exposure Limits

CAS No.	Ingredient	Source	Value
64-17-5	Ethanol	ACGIH	1000 ppm
DNEL Local Exposure	No Established Limit		
DNEL Systematic Exposure	380 mg/m		
National	No Established Limit		

8.2. Exposure controls

Respiratory	If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.
Eyes	Protective safety glasses recommended
Skin	Avoid skin contact. Protective gloves recommended.
Engineering Controls	Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.
Other Work Practices	Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

Section 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Liquid
Color	White to yellowish
Odor	Alcohol-like. [Slight]
Melting point / freezing point	No available information
Initial boiling point and boiling range	No available information
Flammability (solid, gas)	Not Applicable
Upper/lower flammability or explosive limits	Lower Explosive Limit: No available information Upper Explosive Limit: No available information
Flash Point	40-45°C, Test method: (Close cup)
Auto-ignition temperature	No available information
Decomposition temperature	No available information
pH	6-8
Viscosity (cSt)	No available information
Solubility in Water	No available information
Partition coefficient n-octanol/water (Log Kow)	No available information
Vapor pressure (Pa)	No available information
Relative Density	No available information
Vapor Density	No available information
Evaporation rate (Ether = 1)	No available information
Oxidising properties	No available information
Explosive properties	No available information
Density	No available information

9.2. Other information

No other relevant information.

Section 10. Stability and reactivity

10.1. Reactivity

Hazardous Polymerization will not occur.

10.2. Chemical stability

Stable under normal circumstances.

10.3. Possibility of hazardous reactions

No available information

10.4. Conditions to avoid

Avoid high temperatures and contact with incompatible material

10.5. Incompatible materials

No available information

10.6. Hazardous decomposition products

No hazardous decomposition data available.

Section 11. Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Exposure to solvent vapor concentrations from the component solvents in excess of the stated occupational exposure limits may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms include headache, nausea, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in dryness, irritation and possible non-allergic contact dermatitis. Solvents may also be absorbed through the skin. Splashes of liquid in the eyes may cause irritation and soreness with possible reversible damage.

Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

Ingredient	Oral LD50, mg/kg	Skin LD50, mg/kg	Inhalation Vapour LC50, mg/L/4hr	Inhalation Dust/Mist LC50, mg/L/4hr	Inhalation Gas LC50, ppm
Ethanol - (64-17-5)	10,470.00, Rat - Category: NA	17,100.00, Rabbit - Category: NA	124.70, Rat - Category: NA	No data available.	No data available.

Classification	Category	Hazard Description
Acute toxicity (oral)	---	---
Acute toxicity (dermal)	---	---
Acute toxicity (inhalation)	---	---
Skin corrosion/irritation	---	---
Serious eye damage/irritation	---	---
Respiratory sensitization	---	---
Skin sensitization	---	---
Germ cell mutagenicity	---	---
Carcinogenicity	---	---
Reproductive toxicity	---	---
STOT-single exposure	---	---
STOT-repeated exposure	---	---
Aspiration hazard	---	---

11.2 Information on other hazards

11.2.1. Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

Section 12. Ecological information

12.1. Toxicity

No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

Ingredient	96 hr LC50 fish, mg/L	48 hr EC50 crustacea, mg/L	ErC50 algae, mg/L	3hr IC50 Bacteria mg/L	Biodegradability %
Ethanol - (64-17-5)	15,400.00, Lepomis macrochirus	>10,000.00, Daphnia magna	17.92, Ulva pertusa	>1,000.00	89.00

12.2. Persistence and degradability

There is no data available on the preparation itself.

12.3. Bioaccumulative potential

No available information

12.4. Mobility in soil

No available information

12.5. Results of PBT and vPvB assessment

This product contains no PBT/vPvB/vPvM chemicals.

12.6 Endocrine disrupting properties

This product contains no endocrine disrupting chemicals.

12.7. Other adverse effects

No available information

Section 13. Disposal considerations

13.1. Waste treatment methods

Observe all federal, state and local regulations when disposing of this substance.

Section 14. Transport information



	ADR/RID	IMO / IMDG (Ocean Transportation)	ICAO/IATA
14.1. UN number	Not regulated.	Not regulated.	Not regulated.
14.2. UN proper shipping name			
14.3. Transport hazard class(es)			
14.4. Packing group			
14.5. Environmental hazards			
Marine Pollutant: No;			
14.6. Special precautions for user			
No available information			
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

EU Legislation

REGULATIONS (EU) 2023/707, (EU) 2020/878 amending Regulations EU 2015/830 and (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH). REGULATION (EC) 1272/2008 on the classification, labeling and packaging of substances and mixtures (CLP).

National Legislation

{15LocalRegNew}

WGK Class: 1

Candidate List of SVHC for Authorisation: Not Applicable

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:

Ethanol (Use restricted. See item 40.)

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

Section 16. Other information

Revision Date

3/3/2025

Revision Number

01

The full text of the phrases appearing in section 3 is:

H225 Highly flammable liquid and vapor.

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - International Carriage of Dangerous Goods by Road (Accord Dangereux Routier)

CAS - Chemical Abstract Service

CLP - Classification Labeling and Packaging

DOT - Department of Transportation

EC50 - European Commission

EC50 - Half maximal effective concentration

ErC50 - The concentration of test substance which results in a 50 percent reduction in growth rate (ErC50) relative to the control within 72hrs exposure.

GHS - Globally Harmonized System

IARC - International Agency for Research on Cancer

IATA - International Civil Aviation Organization

IC50 - The amount of a substance suspended in the air required to kills 50% of a test animals during a predetermined observation period.

ICAO - International Civil Aviation Organization

IMDG - International Maritime Dangerous Goods

IMO - International Maritime Organization

LC50 - Is the Lethal Concentration of a substance at which 50% of test animals die.

LD50 - Is the Lethal Dose at which 50% of the animals will be expected to die.

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PBT - Persistent, Bioaccumulative and Toxic Chemicals

PEL - Permissible Exposure Limit

REACH - Registration, Evaluation, Authorization and Restriction of Chemicals

RID - Regulations concerning the international carriage of dangerous goods by rail)

STEL - Short Term Exposure Limit

TWA - Time Weighted Average

vPvB - Very Persistent and very Bio-accumulative

WGK - Water Hazard Class

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification

Flammable Liquid, category 3;H226

Justification

On basis of test data

The information provided in this safety data sheet is based on current knowledge about the product and current legal requirements and standards. Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

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