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1. SECTION 1: Identification of the product and of the company/undertaking

1.1. Product identifier

Commercial name: **Solunar**

Chemical name: Ascophyllum nodosum pure extract

EC No: Not available

CAS No: Not available

1.2. Relevant identified uses of the product and uses advised against

Identified uses: Fertilizer (Amenity).

Uses advised against: Not identified.

1.3. Details of the supplier of the product safety document

Advance Grass Solutions Ltd, Unit 6 Norcot Industrial Estate,
Sterling Way, Tilehurst, Reading, Berkshire RG30 6HW
+44 (0) 1183 914540 email info@advancegrass.com

1.4. Emergency telephone number

+44 (0) 118 3914540 – Normal hours are 07:30-16:30 Mon-Fri.

+44 (0) 7789 935208 – Out of normal hours only.

2. SECTION 2: Hazards identification

2.1. Classification of the product

Classification in accordance with European Regulation (EC) No. 1272/2008:


The product is not hazardous.

2.2. Label elements

The product is not classified as dangerous; therefore no specific label elements are required.

2.3. Other hazards

No data available. (See section 12).

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2. SECTION 3: Composition/information on ingredients

Product identifier: **Solunar**

Chemical name	CAS No.	EINECS No.
Ascophyllum nodosum pure extract	Not available	Not available

3. SECTION 4: First aid measures

3.1. Description of first aid measures

Inhalation:

Keep patient at rest and maintain body temperature. Remove the victim to a ventilated area. Get medical attention. Give symptomatic and supportive treatment, if required.

Skin contact:

After contact with skin, remove contaminated clothing and wash immediately with plenty of water and soap. If irritation develops, seek medical attention.

Eye contact:

Immediately wash affected eyes for at least 15 minutes, taking care to rinse under eyelids. Consult an eye specialist.

Ingestion:

Rinse mouth with water. Get medical attention and show the label or packaging. Do not induce vomiting. If vomiting occurs, keep victim's head below hips to prevent aspiration.

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

No data available.

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


All treatments should be based on observed signs and symptoms.

4. SECTION 5: Fire-fighting measures

4.1. Extinguishing media

Suitable extinguishing media: chemical powder, CO₂, water spray or alcohol resistant foam.

Unsuitable extinguishing media: Direct water spurt (water jet).

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4.2. Special hazards arising from the product

Possibility of exposure to toxic combustion products.

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

4.3. Advice for fire-fighters

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus and personal protective equipment.

5. SECTION 6: Accidental release measures

5.1. Personal precautions, protective equipment and emergency procedures

Isolate and delimit the affected area.
 Eliminate all sources of ignition.
 Use personal protective equipment and respiratory protection.
 Avoid contact with skin and eyes.
 Evacuate personnel to safe areas.
 Ensure adequate ventilation.

5.2. Environmental precautions

Prevent the product reaches the sewer.
 Prevent soil contamination.

5.3. Methods and material for containment and cleaning up

Clean up with absorbent materials (eg. soil, sand, diatomaceous earth or any non-flammable absorbent).
 Store collected material in adequate containers for disposal. Label these containers and manage in accordance with local regulations.
 Do not mix with other waste materials.
 If there are spills or uncontrolled discharges on surface waters (or water for public use), immediately inform the local authorities.

5.4. Reference to other sections

See Sections 8 and 13.

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6. SECTION 7: Handling and storage

6.1. Precautions for safe handling

See also Section 8.

Use personal protective equipment (PPE). Avoid contact with skin, eyes and clothing.

Ensure adequate ventilation.

Do not handle the product near a source of ignition or near open flame.

Do not smoke, drink or eat while handling the product.

Wash hands with soap after handling and before eating, drinking, smoking or using the toilet.

Remove clothing immediately if the product is inside. Wash skin thoroughly with mild soap and dress clean clothes.

6.2. Conditions for safe storage, including any incompatibilities

Do not store near or with any of the incompatible materials listed in Section 10.

Do not store with food, beverages, feed and water supplies.

Do not store near flame, heat sources or near strong oxidizing agents.

Avoid extreme temperatures.

Store the product in the original container.

Keep tightly closed containers in a dry, cool and well ventilated sheltered from the sun.

Keep out of reach of unauthorized persons, children and animals.

6.3. Specific end use(s)

See section 1.2.

7. SECTION 8: Exposure controls/personal protection

7.1. Control parameters

Exposure limit(s): No data available for this product.

7.2. Exposure controls

8.2.1 Proper technical controls

See also Section 7.

Ensure adequate ventilation and/or exhaust ventilation.


8.2.2 Individual protective measures

Respiratory protection: Use breathing mask with appropriate filter.

Hand protection: Use protection gloves.

Eye protection: Wear safety glasses with side-shields (e.g. EN 166) or facial protection screen.

Skin and body protection: Work clothes, apron and protective boots are recommended.

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Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Have eye wash bottle with distilled water. Remove and wash contaminated clothing before reuse. Wash hands before breaks and immediately after handling.


8.2.3 Environmental exposure controls

Do not flush into surface waters or sanitary drain systems.

8. SECTION 9: Physical and chemical properties

8.1. Information on basic physical and chemical properties

Appearance:	Liquid
Colour:	Green
Odour:	Marine
Odour threshold:	No data available
pH:	4,2
Freezing point:	No data available
Boiling point:	102 °C
Evaporation rate:	No data available
Flash point:	Not applicable
Decomposition temperature:	No data available
Auto-ignition temperature:	Not applicable
Flammability:	Not applicable
Explosive properties:	Not applicable
Oxidizing properties:	Not applicable
Vapour pressure:	No data available
Vapour density:	No data available
Viscosity:	Dynamic at 22 °C: 200-410 P
Density:	1,0
Solubility:	Total in water
Partition coefficient n-octanol/water (log Pow):	No data available

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8.2. Other information

No data available.

9. SECTION 10: Stability and reactivity

9.1. Reactivity

The product is not reactive under normal conditions.

9.2. Chemical stability

The product is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

9.3. Possibility of hazardous reactions

No hazard reactions are expected under normal processing.

9.4. Conditions to avoid

Avoid direct exposure to sunlight.

Avoid exposure to light.

Avoid heat sources.

Avoid high temperatures.

Do not store below 5 °C or above 30 °C.


9.5. Incompatible materials

No data available.

9.6. Hazardous decomposition products

No data available.

10. SECTION 11: Toxicological information

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10.1. Information on toxicological effects

- (a) **Acute toxicity:** No data available.
- (b) **Skin corrosion/irritation:** No data available.
- (c) **Eye damage/irritation:** No data available.
- (d) **Respiratory or skin sensitization:** No data available.
- (e) **CMR – Carcinogenicity, Mutagenicity and Reproductive toxicity:** No data available.
- (f) **STOT – single and repeated exposure:** No data available.
- (g) **Aspiration hazard:** No data available.

11. SECTION 12: Ecological information

11.1. Toxicity

- (a) **Aquatic toxicity:** No data available.
- (b) **Sediment toxicity:** No data available.
- (c) **Terrestrial toxicity:** No data available.

11.2. Persistence and degradability

No data available.

11.3. Bioaccumulative potential

No data available.

11.4. Mobility in soil

No data available.

11.5. Results of PBT and vPvB assessment

No data available.

11.6. Other adverse effects

No data available.

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12. SECTION 13: Disposal considerations

12.1. Waste treatment methods

Dispose of waste materials at a licensed site.

Rinse with water the used containers three times and empty the water into the application tank.

Do not burn containers, even after use. Disable the used packaging and dispose of content and/or empty containers in accordance with local, regional, national, and/or international regulations.

13. SECTION 14: Transport information

ADR/RID:

Not classified as hazardous for transport within the transport regulations.

IMDG:

Not classified as hazardous for transport within the transport regulations.

ICAO/IATA:

Not classified as hazardous for transport within the transport regulations.

14. SECTION 15: Regulatory information

14.1. Safety, health and environmental regulations/legislation specific for the product

- European Regulation (EC) No.1272/2008 on classification, labelling and packaging of substances and mixtures.

- European Regulation (EC) No. 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).


- Commission Regulation (EU) No. 453/2010, amending Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).

14.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this product.

15. SECTION 16: Other information

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Added, deleted or revised information: First version.

Legend to abbreviations:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.

IATA: International Air Transport Association.

ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.2

IMDG: International Maritime Dangerous Goods.

PBT: Persistent, Bioaccumulative and Toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STOT: Specific Target Organ Toxicity.

vPvB: Very Persistent and very Bioaccumulative.

Key literature references and sources for data:

ESIS: European Chemical Substances Information System.

ECHA: European Chemicals Agency: <http://echa.europa.eu/>

Classification and Labelling Inventory Database: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Institute for Health and Consumer Protection (European Commission): <http://ihcp.jrc.ec.europa.eu/>

Instituto Nacional de Seguridad e Higiene en el Trabajo: <http://www.insht.es>

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