



## Section 1. Product and Company Identification.

**1.1 Model Number;** GL62 v1  
**1.2 Description;** Solar Powered LED Garden Lamp 1690mm  
Battery: 1.5 Volt. 9 grams.

**1.3 Manufacturer;**

Sealey Group.  
Kempson Way,  
Bury St. Edmunds,  
Suffolk.  
IP32 7AR

**1.4 Emergency telephone number;** 44 (0) 1284 757 500 (Office Hours)

**Date of source compilation;** 1 December 2014.

## Section 2. Hazards Identification.

Battery is hermetically sealed and does not present a hazard under normal conditions of use.

**Ingestion:** Swallowing a battery can be harmful. Contents of an open battery can cause serious chemical burns of mouth, oesophagus, and gastrointestinal tract.

**Inhalation:** Contents of an open battery can cause respiratory irritation.

**Skin Contact:** Contents of an open battery can cause skin irritation and/or chemical burns.

**Eye Contact:** Contents of an open battery can cause severe irritation and chemical burns. Battery is hermetically sealed and does not present a hazard under normal conditions of use.

Inappropriate handling and / or use can cause electrolyte to leak.

**Ingestion:** Contents of an open battery can cause chemical burns of mouth, oesophagus, and gastrointestinal tract.

**Inhalation:** Contents of an open battery can cause respiratory irritation.

**Skin Contact:** Contents of an open battery can cause skin irritation.

**Eye Contact:** Contents of an open battery can cause irritation.



### Section 3. Substances.

3.1 Chemical Name (substance)	3.1 CAS No.	3.2 Concentration	Classification	
			Hazard Class & Category Code	Hazard Statements
Hydrogen absorbing alloy	-	38%	-	-
Nickel, Nickel hydroxide	7440-02-0	32%	Carc. 2 Skin Sens. 1 Carc. Cat. 1 R49 R43 R53	H351 H317
Iron	-	10%	-	-
PP fibre separator	-	8%	-	-
Potassium hydroxide	1310-58-3	4%	Acute Tox. 4 Skin Corr. 1A Xn; R22 C; R35	H302 H314
Cobalt	7440-48-4	3%	Resp. Sens. 1 Skin Sens. 1 Aquatic Chronic 4 R42/43 R53	H334 H317 H413
Nylon	-	3%	-	-
Other	-	2%	-	-

For full text of Phrases and Statements, see Section 16.



## Section 4. First Aid Measures.

### 4.1 Description of first aid measures

#### Inhalation

If breathing difficulties develop, remove the person to fresh air.  
Ensure that person is warm.  
Loosen close fitting clothing.  
Get medical attention.

#### Skin Contact

Wash off immediately with soap and plenty of water.  
Remove all contaminated clothes and shoes.  
If symptoms persist, seek immediate medical attention.

#### Eye Contact

Immediately flush with plenty of water.  
After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.  
Keep eye wide open while rinsing.  
Get immediate medical attention immediately.

#### Ingestion

Get immediate medical attention immediately.  
Do not induce vomiting.  
If the casualty is conscious, give large amounts of water.  
Never give anything by mouth to an unconscious person.

#### Protection of First Aiders:

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

**4.2. Most important symptoms and effects, both acute and delayed**  
No information available.

**4.3. Indication of any immediate medical attention and special treatment needed**  
No information available.

## Section 5. Fire Fighting Measures.

### 5.1. Extinguishing media

CO<sub>2</sub>, Extinguishing Powder, Water Spray.  
Use firefighting measures that are suitable for the environment.

**5.2. Special hazards arising from the substance or mixture**  
No information available.

### 5.3. Advice for fire-fighters

Wear self-contained breathing apparatus and protective suit.



## Section 6. Accidental Release Measures.

### 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment

### 6.2. Environmental precautions

Prevent entry into waterways, sewers, basements or confined areas.

Do not flush into surface water or sewer system.

### 6.3. Methods and material for containment and cleaning up

Prevent further leakage or spillage if safe to do so.

Absorb escaped substances with earth or sand.

Cover powder spill with plastic sheet or tarpaulin to minimize spreading.

Seal leaking battery and absorbed materials in heavy duty bags.

Dike liquid spill disposal.

Collect in suitable container for disposal.

Clean contaminated surface thoroughly.

### 6.4. Reference to other sections

See Section 7 for information on Safe Handling

See Section 8 for information of Personal Protective Equipment.

See Section 13 for information on disposal.

## Section 7. Handling and Storage.

### 7.1. Precautions for safe handling

Wear appropriate protective clothing, see section 8

### 7.2. Conditions for safe storage, including any incompatibilities

Store batteries in a well ventilated area.

Do not short circuit a battery. A short circuit causes heating and can lead to ignition of surrounding materials.

Minimize the risk of a short circuit, always store batteries in an appropriate container to prevent contact with conductive materials.

Keep batteries away from children.

### 7.3. Specific end use(s)

Intended for use as the battery: Model Number identified in 1.1 with Description stated in 1.2.



## Section 8. Exposure Controls/Personal Protection.

### 8.1. Control parameters

In the event of battery rupture and leakage:

Ventilate the area.

Remove sources of ignition.

### 8.2. Exposure controls

The use of Personal Protective Equipment (PPE) is not necessary under conditions of normal use.

If handling a leaking or ruptured battery, ensure that the following Personal Protective Equipment (PPE) is used.

#### **Eye/Face Protection**

Chemical grade full face shield

#### **Skin Protection**

Acid resistant, natural rubber or neoprene gloves.

Protective rubber apron

Appropriate Personal Protection with long sleeves and long trousers.

#### **Respiratory Protection**

Acid gas filter mask or self-contained breathing apparatus.



## Section 9. Physical and Chemical Properties.

### 9.1. Information on basic physical and chemical properties

The following information is not a technical specification or sales specification.

(a) Appearance:	<p><b>Nickel:</b> Silver-grey metal.  <b>Nickel Hydroxide:</b> Green powder  <b>Hydrogen Powder:</b> Grey/black powder  <b>Cobalt:</b> Grey/black powder.  <b>Iron:</b> Silver/white metal.  <b>Potassium Hydroxide:</b> Clear colourless liquid.  <b>PP Fibre Separator:</b> Yellow fabric  <b>Nylon:</b> Blue solid</p>
(b) Odour:	None.
(c) Odour threshold;	No information available.
(d) pH:	No information available.
(e) Melting point/freezing point;	<p><b>Nickel:</b> approximately 1200°C  <b>Nickel Hydroxide:</b> Not relevant.  <b>Hydrogen Powder:</b> approximately 1200°C  <b>Cobalt:</b> approximately 1200°C  <b>Iron:</b> approximately 1200°C  <b>Potassium Hydroxide:</b> Not relevant.  <b>PP Fibre Separator:</b> 165°C  <b>Nylon:</b> 260°C</p>
(f) Initial boiling point and boiling range;	No information available.
(g) Flash point;	No information available.
(h) Evaporation rate;	No information available.
(i) Flammability (solid, gas);	No information available.
(j) Upper/lower flammability or explosive limits;	No information available.
(k) Vapour pressure;	No information available.
(l) Vapour density;	No information available.
(m) Relative density;	<p><b>Nickel:</b> 8.0 (g/cm<sup>3</sup>)  <b>Nickel Hydroxide:</b> 4.3 (g/cm<sup>3</sup>)  <b>Hydrogen absorbing alloy:</b> 8.2 (g/cm<sup>3</sup>)  <b>Cobalt:</b> 8.0 (g/cm<sup>3</sup>)  <b>Iron:</b> 7.8 (g/cm<sup>3</sup>)  <b>Potassium Hydroxide:</b> approximately 1.3 (g/cm<sup>3</sup>)  <b>PP Fibre Separator:</b> 0.92 (g/cm<sup>3</sup>)  <b>Nylon:</b> 1.15 (g/cm<sup>3</sup>)</p>
(n) Solubility (ies);	No information available.
(o) Partition coefficient: n-octanol/water;	No information available.
(p) Auto-ignition temperature;	No information available.
(q) Decomposition temperature;	No information available.
(r) Viscosity;	No information available.
(s) Explosive properties;	No information available.
(t) Oxidising properties:	No information available.
<b>9.2 Other information:</b>	No information available.



## Section 10. Stability and Reactivity.

### Nickel Hydroxide

**10.1. Reactivity:** No information available.

**10.2. Chemical stability:**

#### Hydrogen Absorbing Alloy

Capable oxidation at air, react with acid.

#### PP Separator, Nylon

Chemical Stability: Release toxic gases at high temperatures over 315°C

#### Potassium Hydroxide

Chemical stability: Capable absorb water and carbon dioxide.

**10.3. Possibility of hazardous reactions:**

No information available.

**10.4. Conditions to avoid:**

#### Hydrogen Absorbing Alloy

Prohibit high temperature, sparks, etc.

#### PP Separator, Nylon

Prohibit high temperature, sparks, etc.

### Potassium Hydroxide

Prohibit water and acid

**10.5. Incompatible materials:**

No information available.

**10.6. Hazardous decomposition products:**

#### Hydrogen Absorbing Alloy

Oxide and hydroxide

#### PP Separator, Nylon

Water and carbon dioxide etc.

#### Potassium Hydroxide

Reacts with metals, acid and many organic compounds.

## Section 11. Toxicological Information.

### **11.1. Information on toxicological effects**

The materials that comprise this battery are hermetically sealed.

The potential for exposure to materials is negligible when this battery is used as directed. See Section 7.

Inappropriate handling and / or inappropriate use of this battery may result in release of the materials that are sealed within.

Inhalation, skin contact and eye contact are possible when the battery is opened.

Exposure to internal components and corrosive fumes will cause irritation to the eyes skin and mucous membranes.



## Section 12. Ecological Information.

When properly used and disposed of correctly, the battery does not present environmental hazard.  
Do not release internal components into water ways, wastewater or ground water.

<b>12.1.</b> Toxicity	No data available.
<b>12.2.</b> Persistence and degradability	No data available.
<b>12.3.</b> Bioaccumulative potential	No data available.
<b>12.4.</b> Mobility in soil	No data available.
<b>12.5.</b> Results of PBT and vPvB assessment	No data available.
<b>12.6.</b> Other adverse effects	No data available.

## Section 13. Disposal Considerations.

### 13.1. Waste treatment methods

Disposal of the battery must be in accordance with local authority regulation.

The battery should be completely discharged prior to disposal and the terminals taped or capped to prevent short circuit.

Do not dispose of batteries with household waste.

Do not dispose of batteries at landfill sites.

Do not incinerate batteries.





**Section 14. Transport Information.**

ADR. International Carriage of Dangerous Goods by Road.

<b>14.1.</b> UN number	UN 3496	
<b>14.2.</b> Name and Description	Batteries, nickel-metal hydride	
	Label	Not subject to ADR.
	Special Provisions	Not subject to ADR.
	Limited Quantities	Not subject to ADR.
	Excepted Quantities	Not subject to ADR.
	Packing Instructions	Not subject to ADR.
	Special Packaging Provisions	Not subject to ADR.
<b>14.3.</b> Transport hazard class(es)	Class	9
	Classification Code	M11
	Transport Category	Not subject to ADR.
	Tunnel restriction code	Not subject to ADR.
<b>14.4.</b> Packing group	Not subject to ADR.	
<b>14.5.</b> Environmental hazards	Does not present an environmental hazard.	
<b>14.6.</b> Special precautions for user	No special precautions necessary.	

IATA. International Air Transport Association.

<b>14.1.</b> UN number	UN 3496	
<b>14.2.</b> UN Proper Shipping Name/Description	Batteries, nickel-metal hydride	
	Hazard Label.	-
	Excepted Quantity	-
	Packaging Instructions	Passenger See A199
		Ltd Qty Forbidden
		Cargo See A199
		ERG Code 9L

**Special Provision A199**

Nickel-metal hydride batteries are not subject to these Regulations provided that they are prepared for transport so as to prevent:

- (a) a short circuit by the effective insulation of exposed terminals or by disconnection of the battery and protection of exposed terminals; and
- (b) unintentional activation.

The words 'Not Restricted' and the Special Provision number must be included in the description of the substance on the Air Waybill when an Air Waybill is used.

<b>14.3.</b> Transport hazard class(es)	Class or Division	9
<b>14.4.</b> Packing group	-	
<b>14.5.</b> Environmental hazards	Does not present an environmental hazard.	
<b>14.6.</b> Special precautions for user	No special precautions necessary.	





**Section 15. Regulatory Information.**

**15.1.** Safety, health and environmental regulations/legislation specific for the substance or mixture:  
No information available.

**15.2.** Chemical safety assessment:  
No information available.

**Section 16. Additional Information.**

Full text of Phrases and Statements used in Section 3;

R22: Harmful if swallowed.

R35: Causes severe burns.

R42: May cause sensitization by inhalation.

R43: May cause sensitization by skin contact.

R49 May cause cancer by inhalation.

R53: May cause long-term adverse effects in the aquatic environment.

H302: Harmful if swallowed.

H314: Causes severe skin burns and eye damage.

H317: May cause and allergic skin reaction.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H351: Suspected of causing cancer.

H413: May cause long lasting harmful effects to aquatic life.

The above information is believed to be accurate and represents the best information currently available.

No warranty is expressed or implied by the above information.

We assume no liability resulting from use of the above information.

The end user should conduct their own investigations to determine the suitability of the above information for their particular purpose.

Issue level	Date	Revisions
1	03/06/16	First issue.

End of Safety Data Sheet.