

Section 1. Product and Company Identification.

1.1 Model Number; 1.2 Description; GL63 v1 Solar Powered LED Garden Lamp Twin Head 1850mm 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.

			Classification		
3.1 Chemical Name (substance)	3.1 CAS No.	3.2 Concentration	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 mediaCO₂, 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 sectionsSee Section 7 for information on Safe HandlingSee 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 parametersIn 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: (b) Odour:	Nickel: Silver-grey meta Nickel Hydroxide: Gree Hydrogen Powder: Gree Cobalt: Grey/black pow Iron: Silver/white meta Potassium Hydroxide: PP Fibre Separator: Yel Nylon: Blue solid None.	en powd y/black /der. I. Clear co	powder lourless liquid.
(c) Odour threshold;	No information availab	le.	
(d) pH:	No information availab	le.	
(e) Melting point/freezing point;	Nickel:	approx	imately 1200°C
	Nickel Hydroxide:	Not rel	
	Hydrogen Powder:		imately 1200°C
	Cobalt:		imately 1200°C
	Iron:	• •	imately 1200°C
	Potassium Hydroxide:		evant.
	PP Fibre Separator:	165°C	
(f) Initial boiling point and boiling range;	Nylon: No information availab	260°C	
(g) Flash point;	No information availab		
(h) Evaporation rate;	No information availab		
(i) Flammability (solid, gas);	No information availab		
(j) Upper/lower flammability or explosive limits;	No information availab		
(k) Vapour pressure;	No information availab		
(I) Vapour density;	No information availab	le.	
(m) Relative density;	Nickel:		8.0 (g/cm ³)
	Nickel Hydroxide:		4.3 (g/cm ³)
	Hydrogen absorbing al	loy:	8.2 (g/cm ³)
	Cobalt:		8.0 (g/cm ³)
	Iron:		7.8 (g/cm ³)
	Potassium Hydroxide:		approximately 1.3 (g/cm ³)
	PP Fibre Separator:		$0.92 (g/cm^3)$
	Nylon:		1.15 (g/cm ³)
(n) Solubility (ies);	No information availab		
(o) Partition coefficient: n-octanol/water;	No information availab No information availab		
(p) Auto-ignition temperature;(q) Decomposition temperature;	No information availab		
	No information availab		
(r) Viscosity;		-	
(s) Explosive properties; (t) Ovidising properties;	No information availab No information availab		
(t) Oxidising properties:	delleve nothernorm on	ie.	
9.2 Other information:	No information availab	le.	

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.
	<u>PP Separator, Nylon</u>
	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.

12.1. Toxicity
12.2. Persistence and degradability
12.3. Bioaccumulative potential
12.4. Mobility in soil
12.5. Results of PBT and vPvB assessment
12.6. Other adverse effects

No data available. 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.
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14.1. UN number	UN 3496	
14.2. 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.
14.3. Transport hazard class(es)	Class	9
	Classification Code	M11
	Transport Category	Not subject to ADR.
	Tunnel restriction code	Not subject to ADR.
14.4. Packing group	Not subject to ADR.	
14.5. Environmental hazards	Does not present an environme	ental hazard.
14.6. Special precautions for user	No special precautions necessa	ry.
IATA. International Air Transport Association.		
14.1. UN number	UN 3496	

14.1. UN number	UN 3496		
14.2. UN Proper Shipping Name/Description	Batteries, nickel-metal Hazard Label.	hydride	-
	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.

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

Section 14. Transport Information. Continued.



IMDG. International Maritime Dangerous Goods.

14.1. UN numberUN 349614.2. UN proper shipping nameBatteries, nickel-metal hydrideSpecial Provision 963Satteries, nickel-metal hydride

Nickel-metal hydride batteries packed or contained in equipment are not subject to the provisions of this Code.

Nickel-metal hydride batteries shall be securely packed and protected from short circuit. They are not subject to other provisions of this Code provided that they are loaded in a cargo transport unit in a total of less than 100 kg gross mass.

	Limited Quantities	0
	Excepted Quantities	EO
	Packaging Instructions	See SP963
	Packing Provisions	-
14.3. Transport hazard class(es)	Class or Division	9
	Subsidiary Risk(s)	-
14.4. Packing group	-	
14.5. Environmental hazards	Does not present an environm	ental hazard.
14.6. Special precautions for user	No special precautions necessa	ary.
14.7. Transport in bulk – Maritime only.	Bulk transport is not applicable	e to this product

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.