



Section 1. Product and Company Identification.

1.1 Model Number; AK3305 v5
1.2 Description; Wind-Up Torch 3 LED Rechargeable
Battery: 100 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; 13 March 2010

Section 2. Hazards Identification.

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 Weight	Classification	
			Hazard Class & Category Code	Hazard Statements
Nickel Hydroxide	12054-48-7	No information available.	Carc. 2 Acute Tox. 4 Acute Tox. 4 Skin Sens. 1 Aquatic Acute 1 Aquatic Chronic 1	H351 H332 H302 H317 H400 H410
Cobalt Oxide	1307-97-6	No information available.	Not classified	-
Cadmium Oxide	1306-19-0	No information available.	Aquatic Acute 1 Aquatic Chronic 1	H400 H410
Nickel Powder	14332-32-2	No information available.	Not classified	-
Cadmium Powder	7440-43-9	No information available.	Carc. 1B Muta. 2 Repr. 2 Acute Tox. 2 STOT RE 1	H350 H341 H361 H330 H372
Graphite Powder	7782-42-5	No information available.	Not classified	-
Iron	7439-89-6	No information available.	Not classified	-
Nylon	-	No information available.	Not classified	-

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

CO₂, 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 for the 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:	Solid.
(b) Odour:	No information available.
(c) Odour threshold;	No information available.
(d) pH:	No information available.
(e) Melting point/freezing point;	No information available.
(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;	No information available.
(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.

9.2 Other information

No information available.



Section 10. Stability and Reactivity.

10.1. Reactivity	No information available.
10.2. Chemical stability	Product is stable under normal storage and handling conditions.
10.3. Possibility of hazardous reactions	Lithium metal reacts with water to produce highly flammable gasses.
10.4. Conditions to avoid	High temperatures or incinerate. Deform, mutilate, crush, pierce, short circuit or expose over a long period to humid conditions.
10.5. Incompatible materials	No information available.
10.6. Hazardous decomposition products	No information available.

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.

Section 13. Disposal Considerations.

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

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.

- 14.1.** UN number UN 3496
14.2. Name and Description Batteries, nickel-metal hydride

Not subject to ADR.

IATA. International Air Transport Association.

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

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 (e.g. by the effective insulation of exposed terminals)
- (b) Unintentional activation.

The words 'Not Restricted and the Special Provision number A199 must be included in the description of the substance on the Air Waybill.

IMDG. International Maritime Dangerous Goods.

- 14.1.** UN number UN 3496
14.2. UN proper shipping name Batteries, nickel-metal hydride

Special Provision 963

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

All other Nickel-metal hydride cells or 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 quantity of less than 100 kg gross mass.



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;

H302: Harmful if swallowed.

H317: May cause an allergic skin reaction.

H330: Fatal if inhaled.

H332: Harmful if inhaled.

H341: Suspected of causing genetic defects.

H350: May cause cancer.

H351: Suspected of causing cancer.

H361: Suspected of damaging fertility or the unborn child.

H372: Causes damage to organs through prolonged or repeated exposure.

H400: Very toxic to aquatic life.

H410: Very toxic to aquatic life with long lasting effects.

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	13/10/10	First issue.
2	15/01/16	Sections 14 and 15.
3	03/08/16	Sections 1.2, 2, 3 & 14
4	07/09/16	Section 14.

End of Safety Data Sheet.