

Ni-MH Battery Pack

SAFETY DATA SHEET

SDS0090US-EN
ACCORDING TO US CFR 1910.1200

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier	Product Name Trade Name	Ni-MH Battery Pack. SOLO760-XXX, SOLO770-XXX, TRUTEST (XXX denotes customer variant).
	CAS No. EINECS No. REACH Registration No.	Article. Article. None assigned.
1.2 Relevant identified uses of the substance or mixture and uses advised against	Identified Use(s) Uses Advised Against	Battery product. None known.
1.3 Details of the supplier of the Safety Data Sheet	Company Identification Telephone Fax E-mail	SDi, LLC, 3535 State Highway 66, Parkway 100 Building 6, Neptune, NJ 07753, USA. (732) 751 9266 (732) 751 9241 sales@sdfire.com
1.4 Emergency telephone number	Info Trac	1-800-535-5053
1.5 Details of the Manufacturer	Company Identification Telephone Fax E-mail	Detectortesters (No Climb Products Ltd), Edison House, 163 Dixons Hill Road, Welham Green, Hertfordshire. AL9 7JE. United Kingdom. +44 (0) 1707 282760 +44 (0) 1707 282777 SDS@detectortesters.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture	US CFR 1910.1200	Not classified as dangerous for supply/use.
2.2 Label elements	Hazard Pictogram(s) Signal Word(s) Hazard Statement(s) Precautionary Statement(s)	None. None. None. None.
2.3 Other hazards		None.
2.4 Additional Information		Under normal conditions of battery use, internal components will not present a health or environmental hazard. In the extreme or adverse conditions (high over-charge, reverse charge, external short circuit), some electrolyte leakage can occur by the safety vent.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Mixtures

3.1.1 SOLO760, SOLO770

Hazardous Ingredient(s)	CAS No.	%W/W
Nickel dihydroxide	12054-48-7	<30
Potassium hydroxide	1310-58-3	<20
Sodium hydroxide	1310-73-2	<20

3.1.2 TRUTEST

Hazardous Ingredient(s)	CAS No.	%W/W
Metal hydride alloy	None	15 - 40
Nickel dihydroxide	12054-48-7	15 - 30
Potassium hydroxide	1310-58-3	3 - 15
Cobalt dihydroxide	21041-93-0	2.5 - 7

3.2 Additional Information

For full text of H/P statements see section 16.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation	Unlikely route of exposure.
	Electrolyte leakage: Remove person to fresh air and keep comfortable for breathing.
	No measures required.
Skin Contact	Electrolyte leakage: Take off immediately all contaminated clothing. Rinse skin with water/shower.



Ingestion

- 4.2 Most important symptoms and effects, both acute and delayed
- 4.3 Indication of any immediate medical attention and special treatment needed

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Unlikely route of exposure.
 Electrolyte leakage: Rinse cautiously with water for several minutes.
 Unlikely route of exposure.
 Electrolyte leakage: Make victim drink water. Do not induce vomiting. Call a POISON CENTER/doctor if you feel unwell.
 None anticipated.
 Electrolyte leakage: Causes severe skin burns and eye damage.
 Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Non-flammable.

- 5.1 Extinguishing media
 Suitable Extinguishing media: Extinguish preferably with dry chemical, sand or carbon dioxide.
 Unsuitable extinguishing media: Water, Water spray.
- 5.2 Special hazards arising from the substance or mixture
 Heating may cause pressure rise with risk of bursting. Hazardous decomposition product(s): Nickel and cobalt compounds.
- 5.3 Advice for fire-fighters
 Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- 6.1 Personal precautions, protective equipment and emergency procedures
 Ensure adequate ventilation. Stop leak if safe to do so.
 Avoid inhalation of vapours. Avoid contact with skin and eyes. Use personal protective equipment as required.
- 6.2 Environmental precautions
 Avoid release to the environment.
- 6.3 Methods and material for containment and cleaning up
 Collect mechanically and dispose of according to Section 13.
 Electrolyte leakage: Neutralize with: weak acid such as vinegar or citric acid before proper disposal. In the event of accumulated electrolyte contain and neutralize spill.
- 6.4 Reference to other sections
 See Also Section 8.

SECTION 7: HANDLING AND STORAGE

- 7.1 Precautions for safe handling
 Do not obstruct safety vent by soldering or welding tabs on the positive top.
- 7.2 Conditions for safe storage, including any incompatibilities
 Store in a cool/low-temperature, well-ventilated (dry) place away from heat and ignition sources.
 Storage temperature: Ambient.
 Storage life: Stable under normal conditions.
 Incompatible materials: None known.
- 7.3 Specific end use(s)
 Battery product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters
- 8.1.1 Occupational Exposure Limits
 Under normal conditions of battery use, internal components will not present a health or environmental hazard.

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Nickel dihydroxide	12054-48-7	-	0.05	-	-	A1
Potassium hydroxide	1310-58-3	-	-	-	2	NIOSH
Sodium hydroxide	1310-73-2	-	-	-	2	NIOSH
Cobalt dihydroxide	21041-93-0	-	0.02	-	-	OSHA 2B

NIOSH = National Institute of Occupational Safety & Health

OSHA = Occupational Safety and Health Administration

A1: Confirmed Human Carcinogen: The agent is carcinogenic to humans based on the weight of evidence from epidemiological studies. 2B: carcinogen designations, C: ceiling limit

- 8.2 Exposure controls
- 8.2.1 Appropriate engineering controls
- 8.2.2 Personal protection equipment

Eye/ face protection



Provide adequate ventilation.
 Not normally required.
 Electrolyte leakage: Wear eye protection with side protection (EN166).

Skin protection (Hand protection/ Other)



Not normally required.
 Electrolyte leakage: Wear impervious gloves (EN374).

Respiratory protection



No personal respiratory protective equipment normally required.
 Electrolyte leakage: Wear suitable respiratory protective equipment.



Specialized Fire Products

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Thermal hazards
8.2.3 Environmental Exposure Controls

Not applicable.
Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties	
Appearance	Solid.
Colour.	Not applicable.
Odour	Odourless.
Odour threshold	Not applicable.
pH	Not available.
Melting point/freezing point	391.73°F(199.85°C)(Nickel dihydroxide).
Initial boiling point and boiling range	Not available.
Flash Point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non-flammable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not applicable.
Vapour density	Not applicable.
Relative density	237.2lb/ft ³ @ 69.8°F (3.8g/cm ³) (Nickel dihydroxide).
Solubility(ies)	Slightly soluble in: Water (Nickel dihydroxide).
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable.
Dynamic viscosity	Not applicable.
Kinematic Viscosity	Not applicable.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.
9.2 Other information	None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	Stable under normal conditions.
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	Keep away from heat and sources of ignition. Protect from moisture.
10.5 Incompatible materials	None known.
10.6 Hazardous decomposition product(s)	No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

This material is unlikely to present a significant health hazard under normal conditions of handling and use.

11.1 Information on toxicological effects	
11.1.1 Article	
Acute toxicity	Low acute toxicity.
Irritation	Non-irritant.
Corrosivity	Not classified.
Sensitisation	It is not a skin sensitiser.
Repeated dose toxicity	None anticipated.
Carcinogenicity	No evidence of carcinogenicity.
Mutagenicity	There is no evidence of mutagenic potential.
Toxicity for reproduction	None anticipated.
11.2 Other information	Contains: Nickel dihydroxide. Harmful if swallowed or if inhaled. Causes severe skin burns and eye damage.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Under normal conditions of battery use, internal components will not present a health or environmental hazard. Contains: Nickel dihydroxide. Very toxic to aquatic life with long lasting effects.
12.2 Persistence and degradability	Not applicable.
12.3 Bioaccumulative potential	Not applicable.
12.4 Mobility in soil	Not applicable.
12.6 Other adverse effects	None.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Recover or recycle if possible. To be disposed of as hazardous waste.
13.2 Additional Information	Disposal should be in accordance with local, state or national legislation.



SECTION 14: TRANSPORT INFORMATION

14.1 UN number	UN 3496
14.2 UN proper shipping name	Batteries, Nickel-metal hydride.
14.3 Transport hazard class(es)	
TDG	Not applicable under Special Provision: 97
ADR	Not applicable.
IMDG	Not applicable under Special Provision: SP117 & SP963
IATA	Not applicable under Special Provision: A199
DOT	Not applicable under Special Provision: 130, 49CFR 172.102
14.4 Packing group	Not applicable.
14.5 Environmental hazards	Not applicable.
14.6 Special precautions for user	Not applicable.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not applicable.
14.8 Additional Information	None.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	
15.1.1 OSHA	
Toxic and hazardous substances (29 CFR 1910; Subpart Z)	Listed.: Sodium hydroxide (CAS No.: 1310-73-2)
National emission standards for hazardous air pollutants (40 CFR 61.01)	All chemicals are not listed.
Title III Consolidated List of Lists	Listed.: Nickel dihydroxide (CAS No.: 12054-48-7), Potassium hydroxide (CAS No.: 1310-58-3), Sodium hydroxide (CAS No.: 1310-73-2)
OSPAR List of Chemicals for Priority Action	All chemicals are not listed
State Right to Know Lists	New Jersey, Pennsylvania, Rhode Island, Minnesota
TSCA (Toxic Substance Control Act)	Listed.: Nickel dihydroxide (CAS No.: 12054-48-7), Potassium hydroxide (CAS No.: 1310-58-3), Sodium hydroxide (CAS No.: 1310-73-2)
Proposition 65 (California)	All chemicals listed.
CAA 602 - Ozone Depleting Substances (ODS)	Listed.: Nickel dihydroxide (CAS.: 12054-48-7) All chemicals are not listed.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1, 9, 14, 16

NFPA		HMIS	
Health	0	Health	0
Fire	1	Fire	1
Instability	0	Instability	0

LEGEND

LTEL	Long Term Exposure Limit
STEL	Short Term Exposure Limit
OSPAR	Oslo and Paris Convention
CAA	Clean Air Act
OSHA	Occupational Safety and Health Administration
NIOSH	National Institute of Occupational Safety & Health

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