NiMH Production Safety Data Sheet

MSD Ref.No:A-2023 M99

Chemical Systems: Nickel Metal Hydride
Model ： 114015-E(2000mAh)
Designed for Recharge: Yes

Section 1 - Manufacturer Information

AKKUPLANET GmbH
Berta-Benz-Str. 18, 40670 Meerbusch
Germany
Telephone number for information:
+49 (0) 2159 92240 00

Section 2 - Hazardous Ingredients

IMPORTANT NOTE:

Classification of Danger	See section 14.
Primary Route(s) of Exposure	Eye,skin contact,ingestion.
Health Hazard	The batteries are not hazardous when used according to the instructions of manufacturer under normal conditions.In case of abuse,there's Hazard of rupture,fire,heat,leakage of internal components,which could cause casualty loss.Abuses including but not limited to the following cases:charged for long time,short circuited,put into fire,whacked with hard object,punctured with acute object,crushed,and broken.

Section-3 Composition/Information on Ingredients

Chemical Name	Concentration or concentration ranges(%)	CAS Number
Cobalt Oxide	2-6	1307-96-6
Nickel Hydroxide	23--28	12054-48-7
Hydroxide absorbing alloy	30--35	N/A
Potassium hydroxide	<2	1310-58-3
Sodium hydroxide	<1	1310-73-2
Lithium hydroxide	<1	1310-66-3
Paper	<1	N/A
Steel Casing	20-25	N/A
Plastic	<1	N/A

Other	<1	N/A

Labeling according to EC directives.

No symbol and Hazard phrase are required.

Note:CAS number is Chemical Abstract Service Registry Number.

N/A= Not apply.

Section 4-First Aid Measures

Eye	Flush eyes with plenty of water for at least 15 minutes,occasionally lifting the upper and lower eyelids.Get medical aid.
Skin	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes.Get medical aid.
Inhalation	Remove from exposure and move to fresh air immediately.Use oxygen if available.
Ingestion	Give at least 2 glasses of milk or water.Induce vomiting unless patient is unconscious.Call a physician.

Section 5- Fire Fighting Measures

Characteristics of Hazard	The product causes burns of eyes,skin and mucous membranes.Thermal decomposition can lead to release of irritating gases and vapors.
Hazardous Combustion Products	Carbon dioxide.
Fire-extinguishing Methods and Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Attention in Fire-extinguishing	Wear self-contained breathing apparatus in pressure-demand,MSHA/NIOSH (approve or equivalent) and full protective gear.

Section 6-Accidental Release Measures

Personal Precautions,protective equipment,and emergency procedures	Avoid contact with skin,eyes or clothing.Ensure adequate ventilation.Use personal protective equipment as required.Evacuate personnel to safe areas.Keep people away from and upwind of spill/leak.Refer to protective measures listed in Sections 7 and 8.
Environmental Precautions	Prevent material from contaminating soil and from entering sewers or waterways.
Methods and materials for Containment	Stop the leak if safe to do so.Contain the spilled liquid with dry sand or earth .Clean up spills immediately.
Methods and materials for cleaning up	Absorb spilled material with an inert absorbent(dry sand or earth).Scoop contaminated absorbent into an acceptable waste container.Collect all contaminated absorbent and dispose of according to directions in Section 13.Scrub the area with detergent and

	water;collect all contaminated wash water for proper disposal.

Section 7-Handing and Storage

Handing	The battery may explode or cause burns,if disassembled,crushed or exposed to fire or high temperatures.Do not short or install with incorrect polarity.
Storage	Store in a cool,dry well-ventilated area away from incompatible substances.Store locked up.Keep out of the reach of children.
Other Precautions	In case of rupture.Handle in accordance with good industrial hygiene and safety practice.Avoid contact with skin,eyes or clothing.Use personal protection equipment.

Section 8-Handing and Storage

Engineering Controls	Use adequate ventilation to keep airborne concentration low.
Personal Protective Equipment	Eye and Face Protection:None required for consumer use.If there is a Hazard of contact;Tight sealing safety goggles.Face protection shield. Skin and Body Protection:None required for consumer use.If there is a Hazard of contact;Wear protective gloves and protective clothing. Respiratory Protection:No protective equipment is needed under normal use conditions.If exposure limits are exceeded or irritation is experienced,ventilation and evacuation may be required.

Section 9- Physical and Chemical Properties

Physical State	Appearance;Prismatic
	Color;Black
	Odour;If leaking,smells of medical ether.
Change in condition:	
PH	Not applicable as supplied.
Flash Point	Not applicable unless individual components exposed.
Flammability	Not applicable unless individual components exposed.
Relative density	Not applicable unless individual components exposed.
Solubility(water)	Not applicable unless individual components exposed.
Solubility(other)	Not applicable unless individual components exposed.

Section 10- Stability and Reactivity

Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to Avoid	None known based on information supplied.
Incompatible materials	Strong acids,Strong oxidizing agents,Strong bases.
Hazardous Decomposition Products	Carbon oxides.

Section 11- Toxicological Information

Irritation	In the event of exposure to internal contents,vapour fumes may be very irritating to the eyes and skin.
Sensitization	Not Available.
Reproductive Toxicity	Not Available.
Toxicologically Synergistic Materials	Not Available.

Section 12- Ecological Information

General note	Do not allow undiluted product or large quantities of it to reach ground water,water course or sewage system.
Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity	Not Available.

Section 13-Disposal Considerations.

Waste Treatment	Recycle or dispose of in accordance with government,state&local regulations.
Attention for Waste Treatment	Deserted batteries shouldn’t be treated as ordinary trash.Shouldn’t be thrown into fire or placed in high temperature.Shouldn’t be dissected.pierced.crushed or treated similarly.Best disposal method is recycling.
UN number	3496
Proper shipping name	Batteries,Nickel-metal hydride
Label(s)/Placard Required	N/A
Special precautions which a user needs to be aware of,or needs to comply with,in connection with	

transport or conveyance either within or outside their premises.	
ICAO/IATA	The batteries are not subject to the provisions of International Civil Aviation Organization(ICAO),TI or International Air Transport Association (IATA) if they meet the requirements of special provision A199 of IATA DGR 64th (2023 Edition).
IMDG CODE:	The batteries are not restricted to IMDG Code 2018 Edition Amdt 39-18 according to special provision 963.
DOT:	Not regulated.
ADR/ADN:	Not regulated.
In addition,the batteries should be well protected against short circuits.	

Section 15- Regulatory Information

Dangerous Goods Regulations.
Recommendations on the Transport of Dangerous Goods-Model Regulations(21st revised edition)
Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria.
International Air Transport Association(IATA)
International Maritime Dangerous Goods(IMDG Code 2018 Edition Amdt 39-18)
Technical Instructions for the Safe Transport of Dangerous Goods.
Classification and code of dangerous goods GB 6944-2012)
2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)
Toxic Substance Control Act (TSCA)
Code of Federal Regulations
In accordance with all Federal,State and local laws.