

ITEM: 4PKE5 - Rechargeable Battery Pack NiMH Whi

PICK REQ: 1123565432

MATERIAL SAFETY DATA SHEET (MSDS)

MSDS: B5764

This MSDS should be attached or kept with the respective product with which it is associated.

MATERIAL SAFETY DATA SHEET - B5764

Associated Grainger Item: 4PKE5 - Rechargeable Battery Pack NiMH Whi

INTEC INDUSTRIES

ROOM 2703, WELL TECH CENTRE
9 PAT TAT STREET, SAN PO KONG
HONG KONG

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: NI-MH SEALED CELL BATTERY

1. HEALTH HAZARD INFORMATION

EFFECTS OF OVEREXPOSURE:

EYE EFFECTS:

IN THE CASE OF A FIRE OR CELL RUPTURE THE ELECTROLYTE SOLUTION INSIDE BATTERY IS EXTREMELY CORROSIVE TO EYE TISSUE AND MAY RESULT IN PERMANENT BLINDNESS. CONTACT WITH NICKEL OXIDE MAY CAUSE MINOR IRRITATION.

SKIN EFFECT:

CONTACT WITH ELECTROLYTE SOLUTION INSIDE BATTERY MAY CAUSE SERIOUS BURNS TO SKIN TISSUES. CONTACT WITH NICKEL COMPOUNDS MAY CAUSE RESULT IN CHRONIC ECZEMA OR NICKEL ITCH.

INGESTION:

INGESTION OF ELECTROLYTE SOLUTION CAUSES TISSUE DAMAGE TO THROAT AREA AND GASTRO/RESPIRATORY TRACT. INGESTION OF NICKEL COMPOUNDS CAUSES NAUSEA AND INTESTINAL DISORDERS.

INHALATION:

NO EXPOSURE POSSIBLE EXCEPT IN THE CASE OF FIRE OR ABUSE. EFFECTS OF INHALATION OF NICKEL COMPOUNDS VARY FROM MILD IRRITATION OF NASAL MUCOUS MEMBRANES TO DAMAGE OF LUNG TISSUES PROPER.

2. EMERGENCY FIRST AID

BATTERY ELECTROLYTE:

EYE CONTACT:

FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES IF ABUSE CAUSES SAFETY VENTS TO ACTIVATE. GET IMMEDIATE MEDICAL ATTENTION.

CONTACT:

IF CONTAMINATED CLOTHING AND FLUSH EFFECTED AREAS WITH PLENTY OF WATER AT LEAST 15 MINUTES. WASH WITH SOAP AND WATER.

INGESTION:

DO NOT INDUCE VOMITING. DILUTE BY GIVING WATER. IF AVAILABLE GIVE SEVERAL GLASSES OF MILD. GET IMMEDIATE MEDICAL ATTENTION. DO NOT GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

INHALATION:

REMOVE TO FRESH AIR. GIVE OXYGEN OR ARTIFICIAL RESPIRATION IF NEEDED. GET IMMEDIATE MEDICAL ATTENTION.

3. REACTIVITY DATA

INCOMPATIBILITIES:

ALUMINUM, ZINC AND OTHER ACTIVE METALS, ACID, CHLORINATED AND AROMATIC HYDROCARBONS, NITRO-CARBONS, HALOCARBONS.

HAZARDOUS DECOMPOSITION PRODUCTS:

NICKEL OXIDE, AND POTASSIUM HYDROXIDE.
HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

4. SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:

USE NIOSH/MSHA APPROVED RESPIRATOR IF CELL BROKEN OPEN DURING A FIRE TO MAINTAIN EXPOSURE LEVELS BELOW THE TWA FOR HYDROGEN ABSORBED ALLOY AND NICKEL COMPOUNDS.

EYE PROTECTION:

USE SPLASH GOGGLES OR FACE SHIELD IF CELL ACTIVATES DUE TO ABUSE.

HAND PROTECTION:

IF EXPOSURE TO ELECTROLYTE SOLUTION, OR DRIED SALTS IS LIKELY, USE ANY WATER-INSOLUBLE NON-PERFORMANCE GLOVE, I.E., SYNTHETIC RUBBER. DO NOT USE LEATHER OR WOOL.

OTHER PROTECTIVE EQUIPMENT:

RUBBER APRON OR EQUIVALENT IF EXPOSURE TO ELECTROLYTE SOLUTION IS LIKELY.

5. FIRE AND EXPLOSION HAZARDS

EXTINGUISHING MEDIA:

MELTING POINT BOILING POINT

NICKEL 2645 DEG. F 4850 DEG. F

NICKEL HYDROXIDE N/A 445 DEG. F (DECOMPOSES TO NiO)

NICKEL OXIDE 3605 DEG. F 90 DEG. F (DECOMPOSES TO Ni AND O2)

SPECIAL FIRE FIGHTING PROCEDURE:

USE SELF-CONTAINED BREATHING APPARATUS TO AVOID BREATHING TOXIC FUMES. WEAR PROTECTIVE CLOTHING AND EQUIPMENT TO PREVENT POTENTIAL BODY CONTACT WITH ELECTROLYTE SOLUTION OR MIXTURE OF WATER AND SOLUTION.

FIRE AND EXPLOSION HAZARDS:

ELECTROLYTE SOLUTION IS CORROSIVE TO ALL HUMAN TISSUES. IT WILL REACT VIOLENTLY WITH MANY ORGANIC CHEMICALS, ESPECIALLY NITRO-CARBONS AND CHLOROCARBONS. ELECTROLYTE SOLUTION REACTS WITH ZINC, ALUMINUM AND OTHER ACTIVE MATERIALS, RELEASING FLAMMABLE HYDROGEN GAS.

6. INGREDIENTS

INGREDIENTS	EXPOSURE LIMITS	QUANTITY
RARE METAL (HYDROGEN ABSORBED ALLOY)		APPROX. 14.5%
NICKEL (AS NICKEL, NICKEL HYDROXIDE, AND NICKEL OXIDE)		APPROX. 44.0%
K+		APPROX. 1.3%
COBALT HYDROXIDE (AS COBALT METAL)		APPROX. 6.7%
MANGANESE		APPROX. 2.4%
ALUMINUM		APPROX. 1.5%
HYDROXYL, LIQUID		APPROX. 1.4%

7. PHYSICAL PROPERTIES

BOILING POINT: NOT APPLICABLE

MELTING POINTING: NOT APPLICABLE

VAPOR PRESSURE: NOT APPLICABLE

VAPOR DENSITY: NOT APPLICABLE

SPECIFIC GRAVITY: 1.17-1.250 (ELECTROLYTE)

EVAPORATION RATE: NOT DETERMINED

SOLUBILITY IN WATER: ELECTROLYTE SOLUTION IS COMPLETELY SOLUBLE

REMAINDER: INSOLUBLE

8. SPILL MANAGEMENT PROCEDURES

ELECTROLYTE SPILL: FLUSH WITH WATER AND NEUTRALIZE WITH DILUTE VITRIOL.

9. DISPOSAL INFORMATION

THE STORAGE BATTERY IS A HAZARDOUS WASTE AND MAY BE RETURNED TO RERC FOR RECYCLING. BATTERY IS TCLP TOXIC. BATTERY AND ELECTROLYTE SOLUTION ARE CORROSIVE. IF NOT RECYCLED, MUST BE DISPOSED OF IN ACCORDANCE WITH ALL INTERNATIONAL, NATIONAL, PROVINCIAL REGULATIONS.