VARTA
THE BATTERY EXPERTS

Material Safety Data Sheet
Nickel Cadmium
Cylindrical Cells (OEM)

Types: **Series RS, RSH, RSE, RST, RSQ**
Chemical system: NiOOH / KOH / Cd - Rechargeable
Voltage: 1.2 V

1. Type, Capacity and Weight

Series	Cell Type	Typical Capacity [mAh]	Weight [g]
RS ...	520 RS	570	19
	600 RS	680	24
RSH ...	RSH 1.3	1400	50
	RSH 2	2200	75
	RSH 4	4600	147
	RSH 7	7800	237
RSE ...	260 RSE	300	11.5
	700 RSE	775	24
	1400 RSE	1500	32
	RSE 1.7	1750	55
	RSE 2.4	2600	70
	RSE 5	5500	155
RST ...	100 RST	100	8
	500 RST	575	24
	RST 1.2	1400	50
	RST 1.8	2000	67
	RST 4	4500	147
	RST 7	7300	237
RSQ ...	RSQ 1.2	1500	52
	RSQ 1.4	1600	52
	RSQ 4	4600	165

2. Ingredients

Material	Approx. percentage of total weight [%]
Nickelhydroxide, Ni $(OH)_2$	11 - 13.5
Nickel, metallic, Ni	10 - 27
Cadmium, metallic (calculated), Cd	20 - 21
Electrolyte (KOH/NaOH/LiOH)	9.5 - 12.5

Components firmly sealed within Ni-plated steel case.

3. Safety Guideline

3.1 Keep out of the reach of children. If swallowed, contact a physician at once.
3.2 In case leaked electrolyte adheres to skin, it may damage skin.
3.3 Released or spilled electrolyte shall be washed out by water to prevent damage of skin or eyes by electrolyte. Contact a physician at once.
3.4 Incineration, short circuit or unusual high current charge or reverse charge may cause fire or rupture and must be avoided.
3.5 Do not disassemble cells.
3.6 Do not solder on cell directly.
3.7 Battery compartment should provide air ventilation.
3.8 Do not short circuit, may cause burns.
3.9 Do not handle out of specification.
3.10 Battery of different electrochemical system, grades, or brands should not be mixed.
3.11 Waste batteries shall be disposed in accordance with appropriate regulations.
3.12 Extinguishing media: water, CO_2, sand
3.13 Cells operated beyond the limits of use given by the manufacturer's instructions may disrupt and release either gas (H_2/O_2) with explosive force and/or Electrolyte.
3.14 Defect and/or exhausted Ni-Cd batteries shall be collected and submitted for recycling. No disposal by throwing into open fire or into rubbish of household.