MATERIAL SAFETY DATA SHEET

MSDS-0174
HH22 AC
REV. DATE: 3/12/95

SECTION 1 - IDENTIFICATION

PRODUCT (TRADE) NAME: NiCad Battery

CHEMICAL FAMILY:

SUPPLIER: OMEGA ENGINEERING INC.
PO BOX 4047
STAMFORD, CT 06907

DATE PREPARED: 1/28/92
SUPERSEDES:

TELEPHONE: (203) 359-1660

SECTION 2 - PRODUCT IDENTIFICATION

Types: V30R, V60R, V100R (110mAh), V110R, V140R, V170R, V250R, V280R
V60RT, V100RT, V289RT
V500RH
CP280

Chemical system: NiOOH I KOH I Cd - Rechargeable

Voltage: 1.2V

SECTION 3 - TYPE, CAPACITY AND WEIGHT

Cell type	IEC code	Typical capacity (mAh)	Weight (g)
V30R	KBL 116/005	35	1.7
V60R	KBL 156/061	65	4
V100R (110mAh)	—	120	6
V110R	—	120	6
V140R	KBL 252/061	155	9.5
V170R	KBL 252/067	190	10
V250R	KBL 252/081	270	11
V280R	KBL 252/091	300	13
V60RT	KBL 156/061	60	4
V100RT	—	100	6
V280RT	KBL 252/091	280	13
V500RH	KBM 346/100	550	27
CP280	KBL 252/076	300	12

SECTION 4 - INGREDIENTS

		Approximate percentage(%) of total weight
Active materials*	- Nickel hydroxide - Ni(OH)2	10
	- Cadmium hydroxide - Cd(OH)2	15–25
	- Potassium hydroxide - KOH	6–41
Passive materials	- Steel	35–50
	- Metallic nickel	15–20
	- Plastic	2

*All cell types are sealed button cell; no chemical hazard will be posed as long as the cell remains in sealed condition.

SECTION 5 - SAFETY GUIDELINES

5.1 Keep out of the reach of children. If swallowed, contact a physician at once.
5.2 Do not incinerate or mutilate — may burst or release toxic materials.
5.3 Do not short circuit — may cause burns.
5.4 Do not solder the battery directly.
5.5 Restrict charging current and time to the recommended value.
5.6 Observe charging temperature — for V. . .R, V. . .RH, and CP range: recommended: +10 to +33°C
permissible: 0 to +45°C

for V. . .RT range: 0 to +65°C

5.7 Battery compartment should provide sufficient space for battery to expand in case of abuse.
5.8 Either battery compartment or battery connector should have a design that makes it impossible to place the battery in reverse polarity.
5.9 Equipment intended for use by children should have tamper-proof battery compartment.
5.10 Battery of different electrochemical systems, grades, or brands should not be mixed.
5.11 Battery disposal method should be in accordance with local and state regulations.

SECTION 6 - MISCELLANEOUS DATA

- All cell types conform to the requirements of IEC Standard 509.
- All cell types are UL recognized components: category BBET2, file no. MH14209(N). (pending for V500RH and CP280).