

MATERIAL SAFETY DATA SHEET

Lithium Ion Battery; Lithium Polymer Battery PoliFlex

To be used with Demi LED Curing Light

1 - IDENTIFICATION

Manufacture By: VARTA Microbattery
Distributor: Kerr Corporation
Address: 1717 West Collins Avenue
City, State, Zip: Orange, CA 92867-5422
Telephone: 1-800-KERR-123
Emergency: Chemtrec 1-800-424-9300
Date Prepared: July 13, 2007

Legal Remark (U.S.A)

Material Safety Data Sheet (MSDS) are a sub-requirements of the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR Subpart 1910.1200. This Hazard Communication Standard does not apply to various subcategories including anything defined by OSHA as an "article". OSHA has defined "article" as a manufactured item other than a fluid or particle; (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g. minute or trace amounts of hazardous chemical, and does not pose a physical hazards or health risk to employees.

Because these product is defined as "article", is exempt from the requirements of the Hazardous Communication Standard, hence this "Safety information" is provided as a service to our customers.

2 - COMPOSITION INFORMATION

Hazardous Ingredients

Material	CAS	Hazard	Contents/Ingredients
Graphite	7782-45-5	-	10-30 %
Lithium Metal Oxide	12190-79-3	Harmful	20-50 %
Organic Electrolyte, Consisting of LiPF ₆		Flammable Corrosive	10-20 %
And organic carbonates			
Copper		-	2-15 %
Aluminum		-	2-20 %
Polymer		-	5-10 %
Stainless Steel/nickel		-	0-20 %

Important Information: The battery is sealed hermetically. The ingredients have no hazard potential, except when the battery is violated or dismantled.

3 - PHYSICAL AND CHEMICAL PROPERTIES

Not applicable if closed.

4 – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Cold water and dry powder in large amount are applicable for burning lithium batteries. Metal extinction powder, rock salt or dry sand are suitable if only a few batteries are involved.

Conditional applicable extinguishing media: Carbon dioxide is only applicable for incipient fire. Do not use warm or hot water

Special protection equipment during fire-fighting: Contamination cloth including breathing apparatus

Special Hazard: At contact of electrolyte with water hydrofluoric acid may be formed. In this case take make sure you have good ventilation.

5 - REACTIVITY DATA

Stability: Stable under normal use.

Conditions to Avoid: Avoid heating above 100°C the risk of rupture occurs and strong oxidizers and strong acids.

6 – TOXICOLOGICAL INFORMATION

Under normal conditions (during charge or discharge) release of ingredients does not occur.

Swallowing of a battery can be harmful. Call the local Poison Control Center for advice and follow-up.

7 - EMERGENCY FIRST AID PROCEDURES

Skin: Flush affected areas with plenty of water. Dab off with polyethylene glycol 400. Remove contaminated cloth immediately. Seek medical assistance.

Eyes: Flush with water for 15 minutes. Contact physician.

Inhalation: Remove to fresh air. Seek medical assistance.

Ingestion: Drink plenty of water. Avoid vomiting. Seek medical assistance

8 - PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case material is released or spilled: Bind released ingredients with powder (rock, salt, sand) then clean with water. Avoid leached substances to get into the earth, canalization or waters.

Waste disposal method: Dispose of in accordance with all federal, state and local regulations.

Precautions to be taken in handling and storing: avoid short circuiting the battery, do not use damage batteries. Do not store close to heating.

Other precautions: Use according to directions.

9-EXPOSURECONTROL/PERSONALPROTECTION

Under normal conditions (during charge and discharge) release of ingredients does not occur. In the event of release of ingredients, the following TLVs have to be considered.

Material TLV*
Cobalt and Compounds: 0.02 mg/m³ (TWA)

*Source: ACGIH Threshold Limit Values for Chemical Substances and Physical Agents, 2002.

10 - TRANSPORTATION INFORMATION

Batteries sold by VARTA Microbarrery are not subjected to the transport regulations of dangerous good, because they fulfill the following requirements (Special provision ADR 188, IATA A45, IMDG 188, DOT/49 CFR Provision 173.185.