

## Questions & Answers on Batteries

### What kind of batteries are in DSC products?

DSC products may contain one or more of the following batteries: non-spillable lead acid, lithium, alkaline and nickel metal hydride. Note: there are some products that do not contain batteries.



### What are the various types of lithium batteries?

Lithium batteries fall into two broad classifications: lithium metal batteries and lithium ion batteries. Lithium ion batteries do not contain metallic lithium and are rechargeable -- for example, these types of batteries are found in lap top computers. Lithium metal batteries are generally non-rechargeable and contain metallic lithium. DSC products use lithium metal batteries such as coin cells, CR123, CR2 and large lithium batteries.

#### Lithium Metal Batteries



#### Lithium Ion Battery



### **What is a hazardous material or dangerous good?**

A hazardous material or dangerous good is any item that is listed in the list of hazardous materials of the relevant transportation regulations. All batteries are listed in these regulations, which make them a hazardous material. Some of our products contain batteries and therefore they must meet the requirements of the relevant transportation regulation for the battery. Some batteries meet exceptions, exemptions or have reduced regulatory requirements for marking, labeling, packaging and documentation.

### **What kind of transportation regulations are there?**

Each country has hazardous materials transportation regulations and there are also international regulations that must be followed. Listed below are some examples of the transportation regulations for all modes of transportation. Note: each regulation uses different terminology such as "hazardous materials" or "dangerous goods" based upon the country or region.

- International Civil Aviation Organization (ICAO) – for air shipments
- International Air Transport Association (IATA) – Recommendations for air shipments
- International Maritime Dangerous Goods Code (IMDG) – for marine shipments
- US DOT Hazardous Materials Regulation 49CFR – For US shipments by all modes
- Transportation of Dangerous Goods (TDGA) – For Canadian shipments by all modes
- The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR) – For European shipments by ground

If air shipments are made in the US, the ICAO, IATA and Hazardous Materials Regulation 49CFR needs to be followed. For ground shipments in the US, the Hazardous Materials Regulation 49CFR needs to be followed.

If air shipments are made in Europe, the ICAO and IATA regulations need to be followed. For ground shipments in Europe, ADR regulations need to be followed. In addition to these international regulations, country specific transport regulations must be reviewed and adhered to ensure proper shipping.

### **Why is the DSC WT4911 / WT8911 Outdoor Siren considered a dangerous good?**

The WT4911 / WT8911 contains a battery that has greater than 4 grams of lithium which would make it a dangerous good under certain transportation regulations. Hazardous materials transport regulations have some exemptions and exceptions for this battery, based upon the mode of transportation.

### **What is the red hash border label on other DSC products that say “Lithium Metal Batteries”?**

This label is called a Lithium Battery Handling label which is required for all air and marine shipments. It is a warning or cautionary label indicating that the package contains lithium batteries that are < 2grams of lithium content and/or cells that are < 1 gram of lithium content. In addition to the label, specific documentation must accompany the shipment as per the regulation.

When shipped by ground, this label is only a cautionary label and can be put on ground shipments to communicate that lithium batteries are present, even if not required by the regulation.

### **Does a distributor or dealer require training to receive Dangerous Goods?**

Yes, all transportation regulations require that employees who are involved in, or who can impact the safe transportation of hazardous materials, must be adequately trained. This means that people that are involved in the shipping and receiving of hazardous materials like batteries are legally required to be trained based upon their responsibilities and the activities that they conduct.

**Where can a distributor get the proper labels to re-ship products?**

Many packaging/shipping or safety suppliers sell hazardous materials transportation labels. Some markings/labels that are required may not be standard labels identified in the regulations and may be printed in house. Note: Class 9 Dangerous Goods and Lithium Battery Handling Label have specific size and color requirements as outlined in the transportation regulations.

**Where can a distributor or dealer get transportation training?**

There are various hazardous materials transportations consultants and training programs that can be researched through the phone book or internet. You may want to discuss your training needs with your trainer in advance so they may customize the training to meet your needs.

**Will the lithium battery regulations change?**

Significant changes to lithium battery regulations occurred in January 2009. Regulatory agencies are constantly evaluating the risks of lithium batteries during transport and are continuously making changes to the regulations to enhance the safe transport of lithium batteries. Currently there are proposed regulations that could possibly require batteries to be considered dangerous goods that at present are not a dangerous good.

**What type of penalties can be expected if a distributor ships the product incorrectly?**

The USDOT can levy maximum civil penalties up to \$50,000 per violation per day that the violation exists.

**Additional Lithium Battery Information**

- [IATA Lithium Battery Guidance Document](#)