Dangerous Goods Safety Advisers Ltd.



Certificate of Classification

"Survivor Location Lights"

I certify that as viewed and based on the information made available to me that the classification for transport, in accordance with UN Modal and relevant Regulations and Agreements of ICAO Technical Instructions & IATA Requirements (Airfreight) IMDG International Maritime Dangerous Goods Code (Seafreight) and ADR (European Agreement concerning the International carriage of dangerous Goods by Road) I confirm that the appropriate identification of the above articles, having due regard for its physical, chemical characteristics and physiological properties is

UN Number:- UN3091
Proper Shipping Name :- Lithium Metal Batteries contained in Equipment
Class/Division:- 9

Daniamant's packing standards complies with the following:- Surface Transport Modes ADR – European Road & IMDG Seafreight Packing Instruction P903/SP188 & Airfreight Packing Instruction 970 Section 1 assigned to Class 9 and subject to all applicable requirements and Section II when Survivor location lights contain lithium metal cells with a lithium metal content not exceeding 1g or lithium metal batteries with a lithium metal content not exceeding 2g

Specific requirements:- Cells/Batteries are protected so as to prevent short circuits, this includes protection against contact with conductive materials within the same packaging that could lead to a short circuit; Survivor location lights are equipped with an effective means of preventing accidental activation; the Survivor location lights containing the cells or batteries are secured against movement within the outer packaging and packed so as to prevent accidental operation during transport;

Packing:- Survivor location lights are packed in strong fibreboard outer packaging's constructed of suitable material of adequate strength and design in relation to the packaging's capacity and its intended use notwithstanding that the cells/batteries are afforded equivalent protection by the Survivor location lights in which they are contained.

Marking & Labelling, Documentation exemptions:- when PACKAGES do not contain more than two batteries < 2g (Lithium metal content) or four cells < 1g (Lithium metal content) installed in Survivor location lights, Labelling, marking or documentation is NOT required when sent by surface transport or when no more than two packages per consignment when consigned by airfreight

Surface Transport : Marking & Labelling: - Survivor location lights containing lithium metal cells with a lithium metal content not exceeding 1g or lithium metal batteries with a lithium metal content not exceeding 2g

Marking Precautionary Statement or Precautionary Label Declaration Statement

Surface Transport: Survivor location lights contain lithium metal cells with a lithium metal content exceeding 1g or lithium metal batteries with a lithium metal content not exceeding 2g

Marking UN3091, Lithium Metal batteries contained in Equipment Labelling :- Class 9

Documentation Transport Document or Dangerous Goods Note.

Airfreight : Marking & Labelling :- Survivor location lights contain lithium metal cells with a lithium metal content not exceeding 1g or lithium metal batteries with a lithium metal content not exceeding 2g

Marking None Labelling Precautionary Label Declaration Statement Packing Maximum Battery weight 5kgs per package

Airfreight: Marking & Labelling: Survivor location lights contain lithium metal cells with a lithium metal content exceeding 1g or lithium metal batteries with a lithium metal content not exceeding 2g

Marking UN3091, Lithium Metal batteries contained in Equipment Labelling: Class 9

Documentation Shippers Declaration of Dangerous Goods by Air Packing Maximum Battery weight 5kgs per package

Documentation Shippers Declaration of Dangerous Goods by Air **Packing** Maximum Battery weight 5kgs per package

Signed Dated 1st April 2016

Clive Savigar Holder of United Kingdom Department of Transport Certificate Number 2814349/130827

Dangerous Goods Safety Advisers Ltd. 🌏



Daniamants Packaging conforms to:-

5.0.2.4.1 Dangerous goods must be packed in good quality packagings which must be strong enough to withstand the shocks and loadings normally encountered in transport, including removal from a pallet, unit load device or overpack for subsequent manual or mechanical handling. Packages must be constructed and closed as to prevent any loss of contents when prepared for transport which might be caused under normal conditions of transport, by vibration or by changes in temperature, humidity or pressure (resulting from altitude, for example). Packages (including inner packagings and receptacles) must be closed in accordance with the information provided by the manufacturer. No dangerous residue must adhere to the outside of packages during transport. These provisions apply, as appropriate, to new, reconditioned or remanufactured packagings.

5.0.2.6.1 Parts of packagings which are in direct contact with dangerous goods:

(a) must not be affected or significantly weakened by those dangerous goods; and
(b) must not cause a dangerous effect, e.g. catalyzing a reaction or reacting with the dangerous goods.

5.1.2.12.1 Where necessary, they must be provided with a suitable inner coating or treatment.

Inner packagings must be packed, secured or cushioned in an outer packaging in such a way that, under normal conditions of transport, they cannot break, be punctured or leak their contents into the outer packaging. Inner packagings containing liquids must be packaged with their closures upward and placed within outer packagings consistent with the orientation markings prescribed in 7.2.4.4 of these Regulations. Inner packagings that are liable to break or be punctured easily, such as those made of glass, porcelain or stoneware or of certain plastic material, etc., must be secured in the outer packagings with suitable cushioning material. Any leakage of contents must not substantially impair the protective properties of the cushioning material or of the outer packaging.

Lithium Cells / Batteries

Cells and batteries, cells and batteries contained in equipment, or cells and batteries packed with equipment, prepared and consigned by the company comply with the following provisions:

(a) (a) each cell or battery is of the type proved to meet the requirements of each test of the UN Manual of Tests and Criteria, Part III, subsection 38.3. Cells and batteries manufactured according to a type meeting the requirements of subsection 38.3 of the UN Manual of Tests and Criteria, Revision 3, Amendment 1 or any subsequent revision and amendment applicable at the date of the type testing may continue to be transported, unless otherwise provided in these Regulations. Cell and battery types only meeting the requirements of the UN Manual of Tests and Criteria, Revision 3, are no longer valid. However, cells and batteries manufactured in conformity with such types before 1 July 2003 may continue to be transported if all other applicable requirements are fulfilled.

(b) each cell and battery incorporates a safety venting device or is designed to preclude a violent rupture under conditions normally incident to transport;

(c) each cell and battery is equipped with an effective means of preventing external short circuits;

(d) each battery containing cells or series of cells connected in parallel is equipped—with effective means as necessary to prevent dangerous reverse current flow (e.g., diodes, fuses, etc.);.5

- (e) cells and batteries must be manufactured under a quality management program that includes:
- 1. a description of the organizational structure and responsibilities of personnel with regard to design and product quality;
- 2. the relevant inspection and test, quality control, quality assurance and process operation instructions that will be used;
- 3. process controls that should include relevant activities to prevent and detect internal short circuit failure during manufacture of cells;
- 4. quality records, such as inspection reports, test data, calibration data and certificates. Test data must be kept and made available to the appropriate national authority upon request;

Note: In house quality management programmes may be accepted. Third party certification is not required, but the procedures listed in 1. to 9. above must be properly recorded and traceable. A copy of the quality management programme must be made available to the appropriate national authority upon request.

Surface Precautionary Statement on packages and documentation

Packages must be handled with care as a flammability hazard exists if the package is damaged;

Special procedures shall be followed in the event the package is damaged, to include inspection and repacking if necessary;

A company telephone number is available for additional information

Training

All company employees have received adequate instruction and training in the preparation and consignment of our products

Products manufactured or marketed by the company do not require a Safety Data Sheet. They are whole units or "articles" as per the USA Hazard Communication Standard & definitions within EU REACH legislation. The batteries within the articles are hermetically sealed, as such, an SDS is not required for these products. While many of the products that the company manufactures are produced from constituents or raw materials that are fluids or particles, once formed into a whole unit, the material cannot be spilled, consumed, ingested, inhaled, or absorbed.