MATERIAL SAFETY DATA SHEET

DIODON HP30 Smart Battery

Creation date: January 2021
Update: January 2021
Version: V1

Section 1: Chemical product and company identification

Product identity:

Name of the product: DIODON HP30 Smart Battery

Chemistry: Lithium-ion

Company identity:

Supplier : DIODON Drone Technology

815 La Pyrénéenne

31670 Labège

FRANCE

Emergency number : + 33 (0)9 81 18 77 59

Section 2: Composition/information on Ingredients

Cell composition :

Positive electrode;	
Cell Type A; Lithium cobalt oxide	20—35wt%
Cell Type B; Lithium nickel manganese cobalt oxide	20—35wt%
Cell Type C; Lithium nickel oxide	20—35wt%
Negative electrode; Carbon	10—20wt%
Electrolyte; Organic electrolyte (mainly composed of alkyl carbonate)	10—20wt%
Enclosure; Plastic	

Chemical name	No	%	Class	Spec. concentrations
Poly[(phenyl glycidyl ether)-co-formaldehyde] n°CAS : 28064-14-4 Numéro d´identification UE : N°CE : 40 - 50	Aquatic Chronic 2 - H411 Eye Irrit. 2 - H319 Skin Irrit. 2 - H315 Skin Sens. 1 - H317	Non applicable		
Poly(Bisphenol A-co-epichlorohydrin) n°CAS : 25068-38-6 Numéro d´identification UE : 603-074-00-8 N°CE : 500-033-5 Numéro d'enregistrement REACH : 01-2119456619-26-XXXX 30 - 40	Aquatic Chronic 2 - H411 Eye Irrit. 2 - H319 Skin Irrit. 2 - H315 Skin Sens. 1 - H317	Non applicable		

Fiberglass composition:

Formaldehyde, oligomeric reaction products with 1-chloro-2,3-epoxypropane and phenol 0.1-0.4% Numéro CAS: 9003-36-5 Numéro CE: 500-006-8 Numéro d'enregistrement REACH: 01-2119454392-40-XXXX
Classification Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411

4,4'-Methylenebis[N,N-bis(2,3-epoxypropyl)aniline] 0.1-0.4% Numéro CAS: 28768-32-3 Numéro CE: 249-204-3 Numéro d'enregistrement REACH: 01-2119472303-45-XXXX
Classification Skin Sens. 1B - H317 Aquatic Chronic 2 - H411

DAPSONE 0.1-0.4% Numéro CAS: 80-08-0 Numéro CE: 201-248-4 Numéro d'enregistrement REACH: 01-2119949572-30-XXXX
Classification Acute Tox. 4 - H302 STOT SE 2 - H371 STOT RE 2 - H373 Aquatic Chronic 2 - H411

p-(2,3-epoxypropoxy)-N,N-bis(2,3-epoxypropyl)aniline 0.1-0.4% Numéro CAS: 5026-74-4 Numéro CE: 225-716-2 Numéro d'enregistrement REACH: 01-2119954405-36-XXXX
Classification Acute Tox. 4 - H302 Skin Irrit. 2 - H315 Skin Sens. 1 - H317 Muta. 2 - H341 Aquatic Chronic 2 - H411

Thermal grease composition :

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
SILICONE	(CAS-No.) 68083-18-1 (EC-No.) 614-273-4	1%	Not classified
ALPHA ALUMINIUM OXIDE	(CAS-No.) 1344-28-1 (EC-No.) 215-691-6	0,1-0,3%	Flam. Sol. 1, H228 Skin Irrit. 2, H315

Section 3: Hazard(s) identification

The lithium covered in this data sheet is hermetically sealed in an aluminium alloy or metal case and not hazardous if used as recommended by the manufacturer.

The materials contained in this battery may only represent a hazard if the integrity of the battery is compromised or if the battery is physically or electrically abused.

Caution:
Do not open or disassemble.

Do not expose to fire or flame.

Do not mix with batteries of varying sizes, chemistries, or types.

Do not puncture, deform incinerate or heat above 60 °C.

Do not short circuit.

Main hazards:

Electrolyte and thermal grease may irritate skin and eyes.

Section 4: First-aid measures

In case of battery rupture of explosion, evacuate personnel from contaminated area and provide maximum ventilation to clear out corrosive fumes/gases and pungent odour.

Eye contact:

Flush with plenty of water for 15 minutes.

Skin contact:

Remove all contaminated clothing and flush affected area with plenty of water.

Inhalation:

Move to fresh air.

Ingestion:

Contact a doctor or a dedicated hospital for poisoning.

Section 5: Firefighting measures

Extinguishing media:

Dry chemical or foam extinguisher; sand.

Special protective equipment:

Use self-contained breathing apparatus to avoid irritant fumes and wear fire protective equipment.

Fire and explosion hazard:

Cells or batteries damaged, opened, or exposed to overheating due to external source or due to unproper use can break and leakage can occur.

Special exposure hazards:

Lithium based component, hydrofluoridric acid and carbon oxides.

Section 6: Accidental release measures

Individual protection:

Use the personal protective equipment. Avoid contact with eyes.

Environmental protection:

Avoid leakage of electrolyte if the cell or battery is opened.

Cleaning process:

Collect the components in specific containers and labelled properly.

Section 7: Handling and storage

Storage:

Store the cell or battery between +5 and +25°C in a ventilated room.
A temperature higher than 60°C could damage the cells.
Humidity might be around 65% (+-10%).
Keep away from heat sources.
Do not allow battery terminals to contact each other or contact with other metals to prevent short circuit.
Do not allow any contaminant inside the connector as this could lead to short circuit.

Do not store the battery with the on-off button pushed.
Store the battery charged between 20 and 50 % of capacity.

Handling:

Do not crush, pierce, short circuit the terminals with conductive goods.
Do not solder or directly heat.
Do not throw into fire.
Do not mix batteries of different types and brands.
Do not mix new and used batteries.
Keep batteries in a non-conductive tray.
Do not dismantle, damage or abuse the battery mechanically.

Section 8: Exposure controls/personal protection

Personal protection:

Under normal conditions of usage, the batteries do not have any hazard components. No need to check during handling when batteries are not damaged.

Exposure controls:

Under normal conditions of usage, the personnel protective equipment should include safety goggles.

Section 9: Physical and chemical properties

N/A

Section 10: Stability and reactivity

Stability:

The product is stable under normal conditions of use and storage.

Reactivity:

Lithium based component, hydrofluoridric acid and carbon oxides.

Section 11: Toxicological information

Do not contain toxic materials.

Section 12: Ecological information

No ecological impact is expected under normal conditions of usage.

Section 13: Disposal considerations

Do not throw into fire or submerse the batteries.

Follow the specific requirements for disposal.

Batteries contained recyclable items, so recycling is recommended. Batterie should not be thrown in the nature.

Section 14: Transport information

Classification:

Class 9

UN number:

UN 3480 LITHIUM-ION BATTERIES

UN 3481 LITHIUM-ION BATTERIES IN/WITH AN EQUIPMENT

Shipping:

Lithium-ion batteries should be conformed with *''UN Manual of test and criteria, Part III, sub-section 38.3''.*

Packaging:

The packaging should be certified to the shipping of lithium-ion battery.

Labelling requirements:

Signs and labels should be conformed to the law.

Section 15: Regulatory information

To this battery the following legislation is applicable:
- ADR: road transport,
- IMDG: maritime transport,
- IATA-DGR: air transport.

Section 16: Other information

This information specified in this document are not a guidance regarding the safety during handling, usage, change, storage, transport, disposal and are not a warranty or a technical specification. The details apply only for the designed product and not valid for a use in combination with any other material or in any process.