SAFETY DATA SHEET ACCORDING TO REGULATION (EC) NO 1907/2006

REVISIONS : 14/10/2019
REPLACES THE VERSION OF: 18/04/2016

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/ UNDERTAKING

Chemical product identification Sample
Description: BATTERY OLIVION+
Sample Model: 131055
Recommended Uses: Electronic Portable Tools
Restrictions on use: N/A

Supplier name: DongGuan PELLENC Electrical&Mechanical Co.,Ltd
Address: Floor 1/2 Building 7-Small Sei Park Northern Area-Songshan Lake Dongguan City
Phone number: 0086 769 22899000
FAX: 0086 769 22899001
E-mail: s.vigouroux@pellenc-china.com

Emergency phone number:44(0) 1865 407333

SECTION 2: HAZARDS IDENTIFICATION

Emergency overview: This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery.
In case of rupture: the below hazards exist.

N° CAS **7429-90-5**
Classification according to GHS
Specific target organ toxicity, repeated exposure (1)
Hazardous to the aquatic environment, long term hazard (4)

Label elements
Hazard pictogram(s) :

Signal word : Danger

Hazard statement(s):
H413 May cause long lasting harmful effects to aquatic life
H372 Causes damage to organs through prolonged or repeated exposure
Precautionary statement(s):
Prevention:
P260 Do not breathe dust.
P264 Wash skin and clothing thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment..
Response:
P314 Get medical advice/attention if you feel unwell..
Storage
None.

Disposal:
P501 Contents handling to approved waste treatment plants.

N° CAS **7440-50-8**
Classification according to GHS
Specific target organ toxicity, single exposure; Respiratory tract irritation (3)
Specific target organ toxicity, repeated exposure (1)
Hazardous to the aquatic environment, long term hazard (3)

Label elements

Hazard pictogram(s):

Signal word : Danger

Hazard statement(s):
H335 May cause respiratory irritation
H372 Causes damage to organs through prolonged or repeated exposure (liver)
H412 Harmful to aquatic life with long lasting effects
Precautionary statement(s):
Prevention:
P271 Use only outdoors or in a well-ventilated area.
P260 Do not breathe dust.
P264 Wash skin and clothing thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment
Response:
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER/doctor/... if you feel unwell.
Storage
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
Disposal:
P501 Contents or container handling to approved waste treatment plants.

Other hazards
Physical and chemical hazards: See Section 10
Human health hazards: See Section 11
Environmental hazards: See Section 12

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixture

Chemical composition	N° CAS	N° CE	Poids (%)
Cobaltate, lithium	12190-79-3	235-362-0	12.9-38.7
Aluminum	7429-90-5	231-072-3	0.7-6.5
Graphite	7782-42-5	231-955-3	6.5-19.5
Copper	7440-50-8	231-159-6	0.7-10

Electrolyte	--	---	0.7-19.5

SECTION 4: FIRST AID MEASURES

Description of first aid measures

General information : No special measures required.

After eye contact

Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persists.

After skin contact

Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get medical attention.

After inhalation

Remove victim to fresh area. Administer artificial respiration if breathing is difficult. Seek medical attention.

After swallowing

Do not induce vomiting. Get medical attention.

Personal protective equipment for first-aid responders: Not available .

Most important symptoms/effects, acute and delayed: Not available.

Indication of immediate medical attention and special treatment needed: Not available.

SECTION 5: FIREFIGHTING MEASURES

Suitable extinguishing media:

Use extinguishing agent suitable for local conditions and the surrounding environment. Such as dry powder, CO2.

Unsuitable extinguishing media:

No data available.

Specific Hazards arising from the chemical:

Special hazards arising from the substance or mixture

Battery may burst and release hazardous decomposition products when exposed ta a fire situation. Lithium ion batteries contain flammable electrolyte that may vent, ignite and produce sparks when subjected to high temperature(>150"C(302 "F)), when damaged or abused (e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

Specific protective actions for fire-fighters:

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions:

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation

Protective equipment:
No further relevant information available.
Emergency procedures:
Remove ignition sources, evacuate area. Sweep up using a method that does not generate dust. Collect as much of the spilled material as possible, placed the spilled material into a suitable disposal container. Keep spilled material out of sewers, ditches and bodies of water.
Environmental precautions:
Do not allow material to be released ta the environment without proper governmental permits.
Methods and materials for containment and cleaning up:
All waste must refer ta the United Nations, the national and local regulations for disposal.
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:
Consumption of food and beverage should be avoided in work areas. Wash hands with soap and water before eating, drinking.
Ground containers when transferring liquid to prevent static accumulation and discharge.
Information about fire and explosion protection
Batteries may explode or cause burns, if disassembled, crushed or exposed to tire or high temperatures. Do not short or install with incorrect polarity.

Conditions for safe storage, including any incompatibilities:
Requirements to be met by storerooms and receptacles
Store in a cool, dry, well-ventilated place.
Information about storage in one common storage facility
Keep away from heat, avoiding the long time of sunlight.
Further information about storage conditions
Keep container tightly sealed.
Specific and use
No data available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

N° CAS	ACGIH	NIOSH	OSHA
12190-79-3	N/A	N/A	N/A
7429-90-5	TLV-TWA 1mg/m3	RELs-TWA 5mg/m3	PELs-TWA 5mg/m3 PELs-TWA 15mg/m3
7782-42-5	TLV-TWA 2mg/m 3	RELs-TWA 2.5mg/m3	PELs-TWA 15mppcf
7440-50-8	TLV-TWA 0.2mg/m3 TLV-TWA 1mg/m3	RELs-TWA 1mg/m3	PELs-TWA 5mg/m3 PELs-TWA 15mg/m3

Appropriate engineering controls:
The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.
Remove all soiled and contaminated clothing immediately.
Wash hands before breaks and at the end of work.
Personal Protective Equipment
Respiratory protection: Wear suitable protective mask in order to reduce the respiratory system. A large number of leakage, wear chemical protective clothing, including self-contained breathing apparatus.
Hand Protection: Wear appropriate protective gloves to reduce skin contact.
Eyes Protection: Wear safety goggles or eye protection combined with respiratory protection.
Skin and Body Protection: Working environment required, wear suitable protective clothing to minimize contact with skin. The type of protective equipment must be according to the concentration and the content of certain hazardous substances in the workplace.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Colour :	Orange.
Physical state :	Prismatic.
Odour :	Non disponible.
Odour threshold :	Non disponible.
pH :	Non disponible.
Melting point/freezing point :	Non disponible.
Initial boiling point and boiling range :	Non disponible.
Flash point:	Non disponible.
Evaporation rate :	Non disponible.
Flammability (solid, gas)	Non disponible.
Explosion Limits (Vol. % in air) :	Non disponible.
Vapor pressure, kPa at 20°C :	Non disponible.
Vapour density :	Non disponible.
Density/Relative density (water = 1) :	Non disponible.
Solubility(ies) :	Non disponible.
Partition coefficient : n-octanol/water	Non disponible.
Auto-ignition temperature :	Non disponible.
Decomposition temperature :	Non disponible.
Viscosity :	Non disponible.
Other informations :	
Voltage :	43,2 V
Electric capacity :	16.2/17.4Ah(Rated /Max)
Electric energy:	700/752Wh(Rated /Max)

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Data not available.
Chemical stability: Stable.
Possibility of hazardous reactions: Data not available.
Conditions to Avoid: Flames, sparks, and other sources of ignition, incompatible materials.
Incompatibilities materials: Oxidizing agents, acid, base.
Hazardous decomposition products: Carbon monoxide, carbon dioxide, lithium oxide fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

N° CAS	LC50 / LD50
12190-79-3	No data available.
7429-90-5	No data available.
7782-42-5	No data available.
7440-50-8	No data available.

Skin corrosion/irritation: Not available.
Serious eye damage/irritation: Not available .
Respiratory or Skin sensitization: Not available.
Germ Cell mutagenicity: Not available.
Carcinogenicity: Not available.
Reproductive toxicity: Not available.
Specific target organ toxicity-Single exposure: Not available.
Specific target organ toxicity-Repeated exposure: Not available.
Aspiration hazard: Not available .
Information on the likely routes of exposure: Not available.
Eye: Not available.
Skin: Not available.
Ingestion: Not available.
Inhalation: Not available.

SECTION 12: ECOLOGICAL INFORMATION

Ecological Toxicity: No data available.
Persistence and degradability: No data available.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal methods:
Recommendation:
Consult state, local or national regulations to ensure proper disposal

Uncleaned packaging
Recommendation: Disposal must be made according to official regulations.

SECTION 14: TRANSPORT INFORMATION

UN Number	
IATA	UN3480
IMDG	UN3480
UN proper shipping name	
IATA	Lithium Ion Batteries
IMDG	Lithium Ion Batteries

Transport hazard class(es)	
IATA	9
IMDG	9
Packaging group	
IATA	/
IMDG	/
Environmental hazard	
Marine pollutant	No
Special precautions for user	Not available

Transport information: BATTERY OLIVION+ 131055 has passed the test UN38.3

Transport Fashion: By air, by sea, by railway, by road.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

N° CAS	TSCA	IESC	DSL / NDSL	EINECS / ELINCS / NLP
12190-79-3	Listed	Listed	Listed DSL	Listed
7429-90-5	Listed	Listed	Listed DSL	Listed
7782-42-5	Listed	Listed	Listed DSL	Listed
7440-50-8	Listed	Listed	Listed DSL	Listed

SECTION 16: Other information

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. Ali materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other Information:

CAS: (Chemical Abstracts Service); EC: (European Commission);

ACGIH: (American Conference of Governmental Industrial Hygienists); NIOSH: (US National Institute for Occupational Safety and Health); OSHA: (US Occupational Safety and Health);

TLV: (Threshold Limit Value) TWA: (Time Weighted Average);

STEL: (Short Term Exposure Limit); PEL: (Permissible Exposure Level); REL: (Recommended Exposure Limit);

PC-STEL: (Permissible concentration-time weighted average); PC-TWA: (Permissible concentration-short time exposure limit); LC50: (Lethal concentration, 50 percent kill);

LD50: (Lethal dose, 50 percent kill);

IARC: (International Agency for Research on Cancer); EC50: (Median effective concentration);

BCF: (Bioconcentration Factor); BOO: (Biochemical oxygen demand);

NOEC: (No observed effect concentration); NTP: (US National Toxicology Program);
RTECS: (Registry of Taxie Effects of Chemical Substances); IATA: (International Air Transport Association);
IMDG: (International Maritime Dangerous Goods);
TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Madel Regulations);
TOC: (Total Organic Carbon);
TSCA: (Taxie Substances Contrai Act of USA); DSL: (the Domestic Substances List of Canada);
NDSL: {the Non-domestic Substances List of Canada)