

# TOTEX INTERNATIONAL LIMITED

Unit 4, 8th Floor, Perfect Industrial Building, 31 Tai Yau Street, Sanpokong, Kowloon, Hong Kong

E-mail : totex@totex.com.hk Tel: 852-2351 6233 Fax: 852-2351 6565



## Material Safety Data Sheet (MSDS)

### 1. IDENTIFICATION OF THE GOODS AND COMPANY UNDERTAKING

Name of Company: Totex International Limited  
Address: Unit 4, 8/F., Perfect Industrial Building,  
31 Tai Yau Street, Sanpokong, Kowloon,  
Hong Kong  
Contact Person: Ms Eva Ho  
Telephone number: 2351-6233  
Fax number: 2351-6565  
For emergency: call CHEMTREC at 1-703-527-3887  
MSDS ref no.: SO4874  
Issue Date: 19-Feb-16  
Product Name: Lithium Ion Batteries

### 2. COMPOSITION OF THE GOODS

| Model#                  | Uses on | Voltage (V) | Capacity (mAh) | Pack Chemistry | No of cell contain in the each pack | Equivalent Lithium Content for each cell(g) | Equivalent Lithium Content for each pack(g) | Wh |
|-------------------------|---------|-------------|----------------|----------------|-------------------------------------|---|---|----|
| OAV321L1R01 / SH-100BP3 | OEM     | 10.8        | 3000           | Lithium Ion    | 3                                   | 0.900                                       | 2.700                                       | 33 |

UN Class: UN 3480 - Class 9

### 3. HAZARDS IDENTIFICATION

This product is safe under normal use. Mis-handling and/or mis-use will cause serious damage to the product, and there will be the possibility of the generating of smoke or metals, rupture, or flaming.

Drop Test: All packaging is capable of withstanding a 1.2m drop test in 6 different flat surface orientation without damage.  
Toxicity: See heading 11  
Additional Information: *Safety Instruction*  
Do not disassemble or reconstruct the product  
Do not short-circuit; Do not swallow the product  
Do not incinerate or heat the product  
Do not use or leave product nearby fire, stove, or heated place  
Do not immerse the product in water or sea water, or get it wet  
Do not give the product impact or throw it  
Do not drive a nail into the product, strike it by hammer or tread it

# TOTEX INTERNATIONAL LIMITED

Unit 4, 8th Floor, Perfect Industrial Building, 31 Tai Yau Street, Sanpokong, Kowloon, Hong Kong

E-mail : totex@totex.com.hk Tel: 852-2351 6233 Fax: 852-2351 6565



## Material Safety Data Sheet (MSDS)

### 4. FIRST AID MEASURES

In case of electrolyte leakage from the battery, necessary actions are described below.

|               |  |
|---------------|--|
| Eye contact:  | Flush the eyes with plenty of clean water such as tap water immediately, without rubbing. Seek medical treatment. If appropriate procedures are not taken, this may cause a loss of sight.   |
| Skin contact: | Wash the contact areas off immediately with plenty of clean water such as tap water, otherwise it might cause irritation on the skin. If this chemical penetrates the clothing, immediately remove the clothing and flush the skin with water promptly. If irritation persists after washing, get medical attention. |
| Inhalation:   | Move the exposed person to area with fresh air immediately, and seek medical treatment.  |
| Ingestion:    | Get medical attention immediately  |

### 5. FIRE FIGHTING MEASURES

Clear fire area of all non-emergency personnel. Clear away any combustible substances from the fire area.

|  |  |
|--|--|
| Extinguishing method:                          | Since vapor, generated from burning battery packs, make eyes, nose, and throat irritate, be sure to extinguish the fire on the windward side. Wear the respiratory protection equipment in some cases. |
| Fire extinguishing agent:                      | Plenty of water, CO <sub>2</sub> , and foam are effective.   |
| Special protective equipment for fire fighter: | Wear the respiratory protection equipment in some cases.   |

### 6. MEASURES FOR ELECTROLYTE LEAKAGE

In case of electrolyte leakage, move the battery packs away from the fire immediately. Avoid contact with spilled or released material. Immediately remove a contaminated clothing.

|                            |   |
|----------------------------|---|
| Personal precautions:      | Remove any ignition sources nearby. Control of dust generation. May consider wearing sufficient ventilation/respiratory protection. Prevention of skin and eye contact with the chemical. |
| Environmental precautions: | Keeping away from drains, surface- and ground-water and soil. Alert the neighborhood if possible.   |
| Method for cleaning up:    | Use of absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.), reduction of gases/fumes with water, dilution.                                   |
| Note:                      | Refer to heading 8 for exposure control<br>Refer to heading 13 for disposal consideration   |

### 7. HANDLING AND STORAGE

|           |   |
|-----------|---|
| Handling: | When packing the battery packs, do not allow terminals to contact each other, or contact with other metals. Avoid improper handling of the packaging box so as not to drop or damage it.<br>Do not disassemble or reconstruct, swallow, incinerate or heat the product.<br>Avoid use or leave product nearby fire, stove or heated place. Do not immerse the product in water or sea water. Dispose of or recycle the product according to your local government law/regulations.   |
| Storage:  | Do not store the battery packs in places of high temperature exceeding 35° or under direct sunlight as it will affect the battery performance only.<br>Avoid places of high humidity, Be sure not to expose the battery pack to condensation, water drop or not to store it under frozen condition. When piling the pallets up or placing them in parallel, appropriate space between each pallet should be provided.<br>Be sure to install suitable fire extinguishing equipment such as automatic fire extinguisher.<br>Avoid storing the battery packs in places where it is exposed to static electricity so that no damage will be caused to the protection circuit of the battery pack. |
| Note:     | Information in this section should relate to the protection of health, safety, and the environment. Please refer to Article 5 of Directive 98/24/EC for more details on safety handling and storage.  |

# TOTEX INTERNATIONAL LIMITED

Unit 4, 8th Floor, Perfect Industrial Building, 31 Tai Yau Street, Sanpokong, Kowloon, Hong Kong

E-mail : totex@totex.com.hk Tel: 852-2351 6233 Fax: 852-2351 6565



## Material Safety Data Sheet (MSDS)

### 8. EXPOSURE CONTROLS

Personal protective equipment: (in case of electrolyte leakage)

*Respiratory Protection:* Protector with ventilator (in case of high concentration of gases), air breather

*Hand Protection:* Suitability and durability of a glove is dependent on usage

*Eye protection:* Goggles / mask

*Protective clothing:* Use protective clothing which is chemical resistant

Facilities: Provide appropriate ventilation system such as local ventilator in the storage place. Local exhaust ventilation is recommended. Firewater monitors and deluge systems are recommended. Eye washes and showers for emergency use

Note: Refer to Article 4 of Directive 98/24/EC for more details on the health and safety of workers

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: The product is stored in the plastic resin case / PVC sleeves. Shape, size and color varies.

Odour: No odor

Specific temperatures/temperature ranges at which changes in physical state occur:

There is no useful information for the product as a mixture

Flash point: N/A

Explosion properties: N/A

### 10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of use

Condition to Avoid: Avoid impact, deconstruct, direct sunlight, high temperature, high humidity, sparks, open flames and other ignition sources

Materials to avoid: Conductive materials, water, seawater, strong oxidizers and strong acids

Hazardous decomposition products: Acrid or harmful fume is emitted during fire

### 11. TOXICOLOGICAL INFORMATION

In case of electrolyte leakage from the product

Irritation: Irritating to eyes, skin, and throat

Sensitivity: Sensitive to skin

Respiratory irritation: Inhalation of vapours may cause irritation to the respiratory system

### 12. ECOLOGICAL INFORMATION

Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.

### 13. DISPOSAL CONSIDERATIONS

When the battery is worn out, dispose of it under the ordinance of each local government or the law issued by relating government.

# TOTEX INTERNATIONAL LIMITED

Unit 4, 8th Floor, Perfect Industrial Building, 31 Tai Yau Street, Sanpokong, Kowloon, Hong Kong

E-mail : totex@totex.com.hk Tel: 852-2351 6233 Fax: 852-2351 6565



## Material Safety Data Sheet (MSDS)

### 14. TRANSPORT INFORMATION

During the transportation of a large amount of battery packs by sea, air, trailer, or railway, do not leave them in place of high temperatures and do not allow them to be exposed to condensation. Confirm no leakage and no over-spilt from a container. Properly store cargo to prevent falling, dropping and breakage. Prevent collapse of cargo piles and wet by rain. The container must be handled carefully. Do not give shocks that result in a mark of hitting on the product. Please refer to heading 7 also.

- Packaging:
- 1) Package  $\leq$  12 packs
    - a. Packed in strong boxes
    - b. Packed in a way to prevent short circuits
  - 2) Package  $>$  12 packs
    1. Packed in strong packaging marked to say that it contains Lithium Ion Batteries
    2. Accompanied by a document indicating that the package contains lithium Ion batteries
    3. Be capable of withstanding 1.2metre drop test in any orientation without short circuiting, damage or release
    4. Maximum 10 Kg gross weight

- Air Shipment:
- Our "Lithium Ion batteries" is not recognized as "DANGEROUS GOODS" because we meet the requirement under IATA Dangerous Goods Regulations edition 57th 2016.
- 1) Section II or IB of Packing Instruction PI965:-
  - 2) Each battery mentioned above is of the type proven to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, subsection 38.3.
  - 3) Each package is withstanding a 1.2m drop test and without:
    - a) damage to cells or batteries contained therein;
    - b) shifting of the contents so as to allow battery to battery (cell to cell) contact;
    - c) release of contents
  - 4) Watt-hour rating is not more than 100Wh.
  - 5) Quantity per package is less than 10 kg (gross)

- Sea Shipment:
- Our "Lithium Ion batteries" can be shipped because we meet the requirement under IMO-IMDG Code Special Provision 188 & 230:-
- Each battery is of the type proven to meet the requirement of each test in the UN Manual of Tests and Criteria, Part 111, sub-section 38.3.
- Each battery is not charged more than 50%

### 15. REGULATORY INFORMATION

Regulation specifically applicable: Directive 67/548/EEC & 1999/45/EC

### 16. OTHER INFORMATION

The information contained in this Safety data sheet is based on the present state of knowledge and current legislation. This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.