

# MSDS REPORT

Tested by  
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Date of issue..... May 19, 2016  
Total number of page(s) ..... 10



Testing laboratory ..... Keyway Testing Technology Co., Ltd.  
Location..... Baishun Industrial Zone, Zhangmutou Town, Dongguan, Guangdong, China  
Applicant..... Penn Elcom INC  
Address:..... 7465 Lampson Ave, Garden Grove, California 92841, USA  
Manufacturer..... Penn Elcom INC  
Address:..... 7465 Lampson Ave, Garden Grove, California 92841, USA  
Standards..... According to EU Regulation No. 453/2010  
Samples Received Date..... May 05, 2016  
Tested Date..... May 05, 2016 – May 19, 2016  
Test item description..... Plastic LDPE&HDPE  
Trade mark..... N/A  
Model/Type designation..... N/A  
Ratings..... N/A  
Output Cord Length (cm)..... N/A  
TRF originator. ....: Keyway Testing Technology Co., Ltd.  
Copyright blank test report.....: Keyway Testing Technology Co., Ltd.  
Test Room Ambient temp. ....25 °C  
Test Room Humidity .....60 %  
Test Room Air Speed .....< 0.5 m/s

## Section 1- Chemical Product and Company Identification

Product Identification: Plastic LDPE&HDPE

Model: --

Manufacture's / Supplier Name: Penn Elcom INC

7465 Lampson Ave, Garden Grove, California 92841, USA

Telephone number of the supplier: +1 714 230 6200

Fax: +1 714 230 6222

E-mail address: california@penn-elcom.com

Preparation Date: 2016-06-18

This MSDS was prepared by Keyway Testing Technology Co., Ltd.

Referenced documents: ISO 11014:2009 Safety data sheet for chemical products

Further information obtainable from: Penn Elcom INC

## Section 2 – Hazards Identification

Preparation hazards and classification	Not dangerous with normal use. Do not dismantle, open or shred Plastic LDPE&HDPE the ingredients contained within or their ingredients products could be harmful.
Apperance, Color, and Odor	Solid object with no odor, orange color.
Primary Route(s) of Exposure	Not applicable
Potential Health Effects:	Not applicable
Medical Conditions Aggravated by Exposure	Not applicable
Reported as carcinogen	Not applicable

## Section 3 – Composition/Information on Ingredients

Plastic LDPE&HDPE is a mixture, and each accounted for 50%.

Hazardous Ingredients (Chemical Name)	Concentration or concentration ranges (%)	CAS Number
Lithium manganate (LiMn <sub>2</sub> O <sub>4</sub> )	N/A	12057-17-9
Graphite (C)	N/A	7782-42-5
Carbon black	N/A	1333-86-4
Poly Vinylidene Fluoride PVDF(-[-CH <sub>2</sub> -CF <sub>2</sub> -]n)	N/A	24937-79-9
Carboxymethyl Cellulose (CMC)	N/A	9004-32-4
Styrene butadiene rubber (SBR)	N/A	61789-96-6
Polypropylene	2.02%	9003-07-0
lithium hexafluoroarsenate (LiPF <sub>6</sub> )	N/A	21324-40-3
Ethylene carbonate (EC)	N/A	96-49-1
dimethyl carbonate (DMC)	N/A	616-38-6
Ethyl methyl carbonate (EMC)	N/A	623-53-0
Propylene carbonate (PC)	N/A	108-32-7
Copper (Cu)	N/A	7440-50-8
Aluminium (Al)	N/A	7429-90-5
Orange oil	N/A	8012-95-1
Other	N/A	N/A

Labeling according to EC directives.

No symbol and risk phrase are required.

Note: CAS number is Chemical Abstract Service Registry Number.

N/A=Not apply.

## Section 4 – First-aid Measures

<b>Inhalation</b>	If contents of plastic LDPE&HDPE are inhaled, remove source of contamination or move victim to fresh air. Obtain medical advice.
<b>Skin contact</b>	If skin contact with contents of plastic LDPE&HDPE occurs, as quickly as possible remove contaminated clothing, shoes and leather goods. Immediately flush with lukewarm, gently flowing water for at least 30 minutes. If irritation or pain persists, seek medical attention. Completely decontaminate clothing, shoes and leather goods before reuse or discard.
<b>Eye contact</b>	If eye contact with contents of plastic LDPE&HDPE occurs, immediately flush the contaminated eye(s) with lukewarm, gently flowing water for at least 30 minutes while holding the eyelids open. Neutral saline solution may be used as soon as it is available. If necessary, continue flushing during transport to emergency care facility. Take care not to rinse contaminated water into the unaffected eye or onto face. Quickly transport victim to an emergency care facility.
<b>Ingestion</b>	If ingestion of contents of plastic LDPE&HDPE occurs, never give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. <b>DO NOT INDUCE VOMITING.</b> Have victim drink 60 to 240 mL (2-8 oz.) of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Have victim rinse mouth with water again. Quickly transport victim to an emergency care facility.

## Section 5 – Fire-fighting Measures

Flammable Properties	Do not direct a solid stream of water or form into burning molten material; this may cause spattering and spread the fire
Suitable extinguishing Media	Use extinguishing media suitable for the materials that are burning.
Unsuitable extinguishing Media	Not available
Explosion Data	<b>Sensitivity to Mechanical Impact:</b> This may result in rupture in extreme cases <b>Sensitivity to Static Discharge:</b> Not Applicable
Specific Hazards arising from the chemical	Fires involving Li-Polymer Battery can be controlled with water. When water is used, however, hydrogen gas may evolve. In a confined space, hydrogen gas can form an explosive mixture. In this situation, smothering agents are recommended to extinguish the fire: Not Applicable
Protective Equipment and precautions for firefighters	As for any fire, evacuate the area and fight the fire from a safe distance. Wear a pressure-demand, self-contained breathing apparatus and full protective gear. Fight fire from a protected location or a safe distance. Use NIOSH/MSHA approved full-face self-contained breathing apparatus(SCBA) with full protective gear.
NFPA	Health: 0; Flammability: 0; Instability: 0.

## Section 6 – Accidental Release Measures

Personal Precautions, protective equipment, and emergency procedures	Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8.
Environmental Precautions	Prevent material from contaminating soil and from entering sewers or waterways.
Methods and materials for Containment	Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.
Methods and materials for cleaning up	Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal.

## Section 7 – Handling and Storage

Handling	Do not open, disassemble, crush or burn. Ensure good ventilation/ exhaustion at the workplace. Prevent formation of dust. Information about protection against explosions and fires: Keep ignition sources away- Do not smoke.
Storage	Store in original containers; Keep containers securely sealed; No smoking, naked lights or ignition sources; Store in a cool, dry, well-ventilated area; Protect containers against physical damage and check regularly for leaks; Observe manufacturer's storage and handling recommendations contained within this MSDS.

### SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



Explosive (Symbol: exploding bomb)



Flammable (Symbol: flame)



Oxidising (Symbol: flame over circle)



Corrosive (Symbol: Corrosion)





Acute toxicity (Symbol: Skull and crossbones)

You'll see that the old 'harmful/irritant' symbol is missing. This has been replaced by the exclamation mark pictogram:



Health hazard/Hazardous to the ozone layer (Symbol: Exclamation mark)

## Section 8 – Exposure Controls and Personal Protection

Engineering Controls	<p>Use local exhaust ventilation or other engineering controls to control sources of dust, mist, fumes and vapor.</p> <p>Keep away from heat and open flame. Store in a cool, dry place.</p>
Personal Protective Equipment	<p>Respiratory Protection: Not necessary under normal conditions.</p> <p>Skin and body Protection: Not necessary under normal conditions, Wear neoprene or nitrile rubber gloves if handling an open or leaking battery.</p> <p>Hand protection: Wear neoprene or natural rubber material gloves if handling an open or leaking battery.</p> <p>Eye Protection: Not necessary under normal conditions, Wear safety glasses if handling an open or leaking battery.</p>
<p>Chemical goggles</p> 	<p>Gloves</p> 
Other Protective Equipment	Have a safety shower and eye wash fountain readily available in the immediate work area.
Hygiene Measures	Do not eat, drink, or smoke in work area. Maintain good housekeeping.

## Section 9 - Physical and Chemical Properties

Physical State	Form: Solid
	Color: Orange
	Odour: --
Change in condition:	
pH, with indication of the concentration	Not applicable
Melting point/freezing point	Not available.
Boiling Point, initial boiling point and Boiling range:	Not available.
Flash Point	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapor Pressure:	Not applicable
Vapor Density: (Air = 1)	Not applicable
Density/relative density	Not available.
Solubility in Water:	Insoluble
n-octanol/water partition coefficient	Not available.
Auto-ignition temperature	130°C
Decomposition temperature	Not available.
Odour threshold	Not available.
Evaporation rate	Not available.
Flammability (soil, gas)	Not available.
Viscosity	Not applicable

## Section 10 - Stability and Reactivity

Stability	The product is stable under normal conditions.
Conditions to Avoid	Vibration encountered during transportation does not cause leakage, fire or explosion.  Do not disassemble, crush, short or install with incorrect polarity. Avoid mechanical or electrical abuse.
Incompatible Materials	Not Available
Hazardous Decomposition Products	This material may release toxic fumes if burned or exposed to fire
Possibility of Hazardous Reaction	Not Available

## Section 11 - Toxicological Information

Irritation	Risk of irritation occurs only if the cell is mechanically, thermally or electrically abused to the point of compromising the enclosure. If this occurs, irritation to the skin, eyes and respiratory tract may occur.
Sensitization	Not Available
Neurological Effects	Not Available
Teratogenicity	Not Available
Reproductive Toxicity	Not Available
Mutagenicity (Genetic Effects)	Not Available
Toxicologically Synergistic Materials	Not Available



## Section 12 - Ecological Information

General note:	Water hazard class 1(Self-assessment): slightly hazardous for water.  Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity	Not Available
Mobility in soil	Not Available
Persistence and Degradability	Not Available
Bioaccumulation potential	Not Available
Other Adverse Effects	Not Available

## Section 13 – Disposal Considerations

Product disposal recommendation: Observe local, state and federal laws and regulations.

Packaging disposal recommendation: Be aware discarded batteries may cause fire, tape the battery terminals to insulate them. Don't disassembly the battery. Completely discharge containers(no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local, state and federal laws and regulations.

## Section 14 – Transport Information

NOT REGULATED FOR TRANSFORT OF DANGEROUS GOOD: UN, IATA, IMDG.

## Section 15 - Regulatory Information

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

**International regulation/Ordinances**

**Requirements of Hazard and safety information on the label**

Disposal of chemicals should comply with the general safety regulations

**EU directives / regulations**

This product need follow the related regulations about dangerous substances regulations of EU directives

## Section 16 - Other Information

The information above is believed to be accurate and represents the best information currently available to us. However, Concorde makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This material safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

The data/information contained herein has been reviewed and approved for general release on the basis that this document contains no export controlled information.

This information of section 1 and 3 is provided by Penn Elcom INC.

\*\*\*\*\* End of Data Sheet \*\*\*\*\*