



felicitysolar®

Make life full of hope

Guangzhou Felicity Solar Technology Co., Ltd.

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Address: (Airport Baiyun) No. 2, 4, 6, 8, 10 and 12 Donghua Huaye Road, Renhe Town, Baiyun District, Guangzhou, Guangdong, P. R. China

Safety Data Sheet

Chemical product and company identification	
Sample Name	Lithium Iron Phosphate Battery System
Model	FLH48100UMG2, FLH48100UCG2, FLH48100UG2M11, FLH48100UG2M12, FLH48100UG2M13, FLH48100UG2M14, FLH48100UG2M15, FLH48100UG2M16
Manufacture	Guangzhou Felicity Solar Technology Co., Ltd.
Manufacture Address	(Airport Baiyun) No. 2, 4, 6, 8, 10 and 12 Donghua Huaye Road, Renhe Town, Baiyun District, Guangzhou, Guangdong, P. R. China
Australian Importer	FELICITY SOLAR AUSTRALIA PTY LTD
Australian Importer Address	706 160 GOULBURN STSURREY HILLS NSW 2010 service@felicitysolar.com
Emergency telephone call	+61 0412862116
Hazards Identification	
Hazard label	 No. 9A hazard label
Explosive risk	This article does not belong to the explosion dangerous goods.
Flammable risk	This article does not belong to the flammable material.
Oxidation risk	This article does not belong to the oxidation of dangerous goods.
Toxic risk	This article does not belong to the toxic dangerous goods.
Radioactive risk	This article does not belong to the radiation of dangerous goods.
Mordant risk	This article does not belong to the corrosion of dangerous goods.
other risk	Battery which belong to the Lithium-ion battery.

Composition information			
Hazardous components	Content /wt%	CAS No.	EC No.
LiFePO ₄	38.8	15365-14-7	--
C	19.4	7782-42-5	--
(C ₂ H ₄) _n	2.2	9002-88-4	--
Al	4.2	7429-90-5	--
Cu	6.7	7440-50-8	--
Al	7.2	7429-90-5	--
(C ₈ H ₈ .C ₄ H ₆) _n	0.8	9003-55-8	--
C	0.4	1333-86-4	--
C ₂ H ₂ F ₂	0.8	24937-79-9	--
LiPF ₆	2.3	21324-40-3	--
C ₃ H ₄ O ₃	5.6	96-49-1	--
C ₄ H ₈ O ₃	4.6	623-53-0	--
C ₃ H ₆ O ₃	5.6	616-38-6	--
Adhesive	1.4	--	--
First aid measures			
Eye Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid. Skin Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid. Inhalation Remove from exposure and move to fresh air immediately. Use oxygen if available. Ingestion Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.			
Fire-fighting measures			
Flash Point: N/A. Auto-Ignition Temperature: N/A. Extinguishing Media: Water, CO₂. Special Fire-Fighting Procedures: Self-contained breathing apparatus. Unusual Fire and Explosion Hazards: Cell may vent when subjected to excessive			

heat-exposing battery contents.

Hazardous Combustion Products: Carbon monoxide, carbon dioxide, lithium oxide fumes.

Accidental release measures

Steps to be Taken in case Material is Released or Spilled

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate.

Waste Disposal Method

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.

Handling and storage

The battery should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container. Do not short circuit terminals, or over charge the battery, forced over-discharge, throw to fire. Do not crush or puncture the battery, or immerse in liquids.

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

Other Precautions

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

Exposure controls/personal protection

Respiratory Protection

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use.

Ventilation

Not necessary under conditions of normal use.

Protective Gloves

Not necessary under conditions of normal use.

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.
 Personal Protection is recommended for venting battery
 Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

Physical and chemical properties
Appearance: Quadrate shape. Odors: If leaking, smells of medical ether. pH: Not applicable as supplied. Flash Point: Not applicable unless individual components exposed. Flammability: Not applicable unless individual components exposed. Relative density: Not applicable unless individual components exposed. Solubility (water): Not applicable unless individual components exposed. Solubility (other): Not applicable unless individual components exposed.
Stability and reactivity
Stability: Product is stable under conditions described in Section 7. Conditions to Avoid: Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions. Materials to avoid: Oxidising agents, alkalis, water. Hazardous Decomposition Products: Toxic Fumes, and may form peroxides. Hazardous Polymerization: N/A. If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated Hydrocarbons.
Toxicological information
Signs & symptoms: None, unless battery ruptures. In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin. Inhalation: Lung irritant Skin contact: Skin irritant. Eye contact: Eye irritant. Ingestion: Poisoning if swallowed. Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to severe irritation, burning and dryness of the skin may occur, Target Organs nerves, liver and kidneys.
Ecological information

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Mammalian effects: None known at present. Eco-toxicity: None known at present. Bioaccumulation potential: Slowly Bio-degradable. Environmental fate: None known environmental hazards at present.
Disposal consideration
Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

Transport information
Label for conveyance: No. 9A hazard label UN Number: UN 3480 Proper Shipping name: Lithium ion batteries IMDG Code/TDG Special provisions: 230, 310, 348, 376, 377, 384, 387 IMDG Code/TDG Packing Instruction: P903 EmS No: F-A, S-I Marine pollutant: No Hazard Classification: The goods shall be complied with the requirements of the Packing Instructions TDG 23th Edition and the Packing Instructions P903 of IMDG Code (Amdt. 42-24), including the passing of the UN38.3 test.
Regulation information
The laws and regulations applicable to the transportation of lithium batteries are as follows: The UN Model Regulations, United Nations ST/SG/AC.10/1/Rev 23. Recommendations on the Safe Transport of Dangerous Goods The International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air Transport The International Air Transport Association (IATA) Dangerous Goods Regulations (66th Edition 2025) International Maritime Organization (IMO) International Maritime Dangerous Goods Code (IMDG Code) (Amdt. 42-24) Agreement concerning the International Carriage of Dangerous Goods by Road (ADR 2025) JT/T 617-2018 Regulations concerning road transportation of dangerous goods.
Other information
This file is only effective to the batteries (Model: FLH48100UMG2, FLH48100UCG2, FLH48100UG2M11, FLH48100UG2M12, FLH48100UG2M13, FLH48100UG2M14, FLH48100UG2M15, FLH48100UG2M16) provided by commissioner which manufactured by



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Guangzhou Felicity Solar Technology Co., Ltd. The commissioner provides the composition information of batteries, and promises its integrity and accuracy. Users should read this file carefully, and use the batteries in correct method. GUANGZHOU CUSTOMS DISTRICT TECHNOLOGY CENTER doesn't assume responsibility for any damage or loss because of misuse of batteries.