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Print Date: 24/03/2022 Version: 1.0

Revision Date: 24/03/2022

Section 1 - Identification of the Substance/Preparation and of the Company/Undertaking

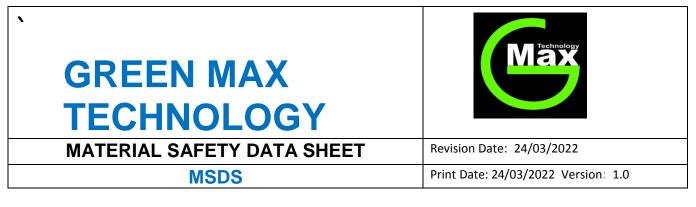
Product Name:	Dry Battery 24 Volt
Reference No:	100020
Product Use:	Energy Storage; Battery Packs
Chemical Family:	N/A
Synonyms:	LFP Battery, Lithium Iron Phosphate Battery
Trade Name:	Green Max Technology Phase I, Plot No. 8, Amaltas Colony, Kolar Road, Chuna Bhatti, Bhopal, Madhya Pradesh - 462016
Phone Number:	9826017221

Section 2 - Hazards Identification

Protective Clothing	NFPA Rating (USA)	EC Classification	GHS Hazard Symbol
Not Required with Normal Use		Not Classified as Hazardous	Warning

Preparation Hazards and Classification:Not dangerous with normal use. The materials within the
Component cells contained in the battery may only represent
A hazard if the structural integrity of the battery and the
Component cell is compromised. Do not expose the batteries





To Fire or open flame. Do not connect or mix batteries of

	Varying, sizes, chemistries, or Types. Do not short circuit, Puncture, incinerate, crush, over-charge, over discharge, or Expose the batteries to temperatures above or below the Declared limit. Damage to the batteries may result in the risk of Fire or explosion, which could release dangerous hydrogen Fluoride gas and exposure to the ingredients contained Within the cells of the battery or their combustion products Could be harmful.
Appearance, Color, and Odor:	Solid object, no odor.
Primary Route(s) of Exposure:	Risk of exposure will only occur if the battery component cell Is mechanically, thermally, or electrically damaged and the Enclosure is compromised. If this occurs, exposure to Electrolyte solutions contained within the battery cell may Occur by inhalation, eye contact, skin contact and ingestion.
Potential Health Effects:	Acute (Short Term): see Section 8 for Exposure Controls and Personal Protection. In the event of disassembly or rupture,
Inhalation:	The electrolyte contained in the cell is corrosive and may Cause burns to skin and eyes. Inhalation of material from a sealed battery is not an Expected route of exposure. Vapors or mists from a ruptured
Ingestion:	Battery may cause respiratory irritation. Swallowing of material from a sealed battery is not an Expected route of exposure Swallowing mists from a ruptured Battery may cause respiratory irritation, chemical burns of the
Skin:	Mouth and gastrointestinal tract irritation, enclinear burns of the Contact between the battery and skin will not cause any harm. Skin contact with positive and negative terminals of high Voltages may cause burns to the skin. Skin contact with a

MSDS

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Print Date: 24/03/2022 Version: 1.0

Revision Date: 24/03/2022

Eye:	Ruptured battery can cause skin irritation. Eye contact with the contents of a ruptured battery can cause Severe irritation to the eye.
Medical Conditions	Medical conditions related to potential exposure modalities
Aggravated by Exposure:	may be exacerbated by exposure to the materials.
Electric Shock and Burn:	Battery System is not hazardous with normal use. The battery System does contain dangerous current capability. The battery System should not be opened or serviced except by qualified Personnel.

Section 3 – Composition/Information on Ingredients

As manufactured and under normal use, this battery is not expected to expose user to hazardous ingredients.

USA: This item is an article pursuant to 29 CFR 1910.1200 and, as such, is not subject to the OSHA Hazard Communication Standard requirement. The information contained in this Safety Data Sheet contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Canada: This is not a controlled product under WHMIS. This product meets the definition of a "manufactured article" and is not subject to the regulations of the Hazardous Products Act.

European Communities (EC): This product is not classified as hazardous according to Regulation (EC) No.1272/2008. This product contains dangerous ingredients however, there is no expected release during use of the product and there is a barrier preventing exposure of the user and the environment.

Any hazardous ingredients will only be contained in the sealed battery cell components within the battery pack. All other component parts of the battery pack are inert materials that do not pose any hazard under

GREEN MAX TECHNOLOGY	Technology
MATERIAL SAFETY DATA SHEET	Revision Date: 24/03/2022
MSDS	Print Date: 24/03/2022 Version: 1.0

normal use and handling. The following chart is the material content of typical material make up of a component cell.

24 VOLT 54 AH BATTERY PACK		
Item name	Rechargeable 24 volt 54 Ah	
	8s9p Lipo4 Battery	
Nominal volt	24 volt – 29 volt	
Nominal capacity	54 Ah	
Charge volt	28v -29v	
Components	8s9p	
Continuous charge / discharge rate	52 Amp	
Capacity (Amp house)	50 A	
Capacity (Watt's)	1380 W	
Chemistry	Lithium ion phosphate cell	
Depth of discharge	90% DOD	
Self-Discharge	≤ 3% per month	
Cell type	cylindrical	
Modular	Series connection	
weight	11 kg	
size	310*280*90 mm	
Water dust resistance	lp61	
BMS function	Automatic function	
	Low volt Disconnect	
	Short circuit protection	
	Over volt protection	
	Over current protection	
	Over charge protection	
	Over discharge protection	
	Over temperature protection	
Charge Temperature	0 °C ~ 48 °C	
Discharge Temp.	-5 °C to 60 °C (-4 °F to 140 °F)	
Storage Temp.	0 °C to 45 °C (32 °F to 113 °F)	

Section 4 – First Aid Measures

Voltage Shock and Burn:

Skin Contact:

Treat per standards for high voltage/current electric shock And Burns. Contact medical professional immediately. Contact with internal contents of the component cell may Cause Burns. If skin contact with internal contents occurs, Remove

MSDS

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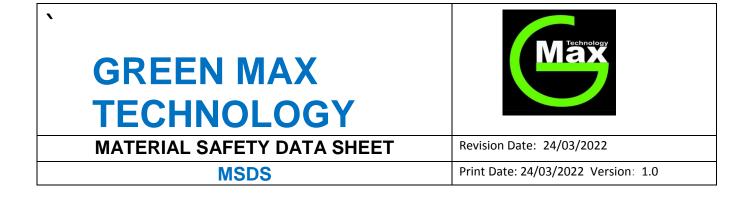
Print Date: 24/03/2022 Version: 1.0

Revision Date: 24/03/2022

Affected articles of clothing Wash affected area with lukewarm Water for at least 30 minutes. If irritation or pain persists, seek Medical attention. Decontaminate affected articles clothing Before reuse or discard. **Eye Contact:** Contact with internal contents may cause burns. If eye contact With internal contents occurs, wash out affected eye with Gentle flowing lukewarm water while holding eyelids open for At least 30 minutes. Rinse with neutral saline solution if Possible. Use caution not to rinse contaminated water into Unaffected eye Nose, mouth, or onto the face. Seek medical Attention. Inhalation: If internal contents are inhaled, move victim to fresh air and Remove source contamination from area. Seek medical advice. Ingestion: If ingestion of internal contents occurs, rinse mouth thoroughly With water. DO NOT INDUCE VOMITING. If vomiting occurs Naturally, have victim lean forward to reduce risk of aspiration And continue to rinse mouth with water. Seek medical Attention immediately. **Caution:** In all cases evacuate the contaminated area. If irritation Persists, seek medical assistance at once.

Section 5 - Fire Fighting Measures

NFPA:	
Health:	0
Flammability:	1
Instability:	0



Suitable Extinguishing Media: Unsuitable Extinguishing Media:	Water, carbon dioxide, dry chemical powder and foam are Most effective means to extinguish a battery fire Not Applicable
Fire Fighting Procedure:	Wear fully protective gear, including self-contained positive pressure breathing apparatus, goggles, fireproofing jacket and gloves. Caution is advised during application of water because burning particles may be ejected from the fire.
Unusual Fire and Explosion Hazards:	Exposing battery cell to excessive heat, fire or over voltage Condition may cause a leak, fire, hazardous vapors and Hazardous decomposition products. Damaged or opened cells Or batteries can result in rapid heating and the release of Flammable vapors and potentially dangerous gases that may Be Heavier than air and could travel along the ground or be Moved by ventilation to an ignition source.
Specific Hazards from the Chemical:	The interaction of water or water vapor and exposed lithium hexafluorophosphate (Li PF6) may result in the generation of Hydrogen and hydrogen fluoride (HF) gas. Contact with Battery electrolyte may be irritating to skin, eyes and mucous Membranes Fire will produce irritating, corrosive and/or toxic Gases. Fumes may cause dizziness or suffocation.

Section 6 - Accidental Release Measures

Personal Precautions:	Hazardous material contained within the batteries cells will only Be expelled if the battery is damaged or abused. If an Accidental release occurs, Personnel in the immediate vicinity Should ensure containment measures and evacuation Procedures are performed rapidly before any clean up. All Non-required personnel for containment and clean up should Observe the evacuation procedures.
Evacuation Procedures:	If an accidental release occurs, evacuate the area, except for Required containment and clean up personnel. Maintain a Minimum clearance of 25

GREEN MAX TECHNOLOGY	Max
MATERIAL SAFETY DATA SHEET	Revision Date: 24/03/2022
MSDS	Print Date: 24/03/2022 Version: 1.0

Meters (75 feet) in all directions. Stay upwind of the release, Keep out of low areas, and ventilate closed areas before re-Entering. Prevent released material from contaminating soil or entering Sewers or waterways by capping drains or placing up barriers.

Containment Procedures:	Stop the release if safe to do so. Contain any spilled liquid With dry sand, earth, or vermiculite. Move the damaged object To an isolated area, Containment chamber, or cover with a fire Proof containment blanket if safe to do so. Clean up spill Immediately.
	immediately.

Environmental Precautions:

Clean Up Procedures: Wear adequate personal protective equipment as indicated in Section 8. Absorb spilled liquid material with an inert absorbent (Dry sand, earth, or Vermiculite) material. Collect all debris and Contaminated absorbent into an acceptable waste container And Dispose of according to directions in Section 13. Scrub the Spill Area with detergent and water; collect all contaminated Wash Water for proper disposal.

Section 7 – Handling and Storage	
Handling Precautions:	Do not expose battery or cell to extreme temperatures or fire. Do not disassemble, crush or puncture battery. Do not Overcharge or over discharge the battery. Do not mix batteries Of varying types or sizes. Do not connect (short circuit) Positive and negative terminals or place the batteries on Conductive metal.
Safe Storage:	Insulate positive and negative terminals, when not in use, to
	Avoid short circuit.
Recommendations:	Ensure sufficient clearance between batteries and other Surfaces. Store in a dry, cool (25°C +/-5°C, 10-50% RH) and Well-ventilated area. Elevated Temperatures can result in Reduced battery life and venting of flammable liquid and gases. Keep batteries away from strong oxidizers and acids. Keep out Of reach of children.

GREEN MAX TECHNOLOGY	Max
MATERIAL SAFETY DATA SHEET	Revision Date: 24/03/2022
MSDS	Print Date: 24/03/2022 Version: 1.0

Personal Protection	
Respiratory Protection:	Not necessary under normal use. In case of battery or cell rupture, Use a self- contained full face respiratory mask.
Skin Protection:	Not necessary under normal use. Wear rubber apron And Viton rubber gloves if handling a ruptured or leaking Battery cell.
Eye Protection:	Not necessary under normal use. Wear safety goggles If handling a ruptured orleaking battery cell.
Engineering Controls:	Use local exhaust ventilation or other engineering controls to Control sources of dust, mist, fume and vapor.
Exposure Limits:	Exposures to hazardous substances are not expected when product is used for its intended purpose. In the event of cell rupture or disassembly the following exposure limits apply.

Common Chemical Name/General Name	OSHA PEL- TWA	ACGIH (2010) TLV-TWA
Lithium Iron Phosphate	10.0 mg/m3 (as iron fume)	5.0 mg/m3 (as iron fume)
Electrolyte	Not Established	Not Established
Carbon, As Graphite	5.0 mg/m3 (respirable fraction)	2.0 mg/m3 (respirable fraction)
Notes: OSHA: Occupational Safety and Healt PEL-TWA: Permissible Exposure Limit		
Average ConcentrationACGIH: Ameri Government Industrial Hygienists	can Council of	
TLV-TWA: Threshold Limit Value-Time	e Weighted Average Concentration	

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Section 9 – Physical and Chemical Properties

Appearance:	Battery	Physical State:	Solid
Color:	Not Applicable	pH:	Not Applicable
Odor Type:	Odorless	Odor Threshold:	Not Applicable
Melting Point:	Not Applicable	Freezing Point:	Not Applicable
Boiling Point:	Not Applicable	Boiling Range:	Not Applicable
Flash Point and Method (C°):	Not Applicable	Evaporative Rate: (n-Butyl Acetate = 1)	Not Applicable
Flammability:	Not Applicable	Flammability/Explosive Limits (%):	Not Applicable
Oxidizing Properties:	Not Applicable	Viscosity:	Not Applicable
Relative Density:	Not Applicable	Auto Ignition Temperature (C°):	Not Applicable
Solubility in Water:	Insoluble	Vapor Pressure: (mm Hg @ 20 C°)	Not Applicable
Water/ Oil Distribution Coefficient:	Not Applicable	Vapor Density: (Air = 1)	Not Applicable
Decomposition Temperature:	Not Applicable		

Section 10 – Stability and Reactivity

Reactivity	Not Applicable
Chemical Stability:	Stable under normal use.
Other:	
Possibility of Hazardous	Hydrogen fluoride gas may be produced in reaction with water.
Reactions:	
Conditions to Avoid:	Avoid exposing battery to high temperatures. Do not incinerate, deform,
	Mutilate, crush, pierce, short circuit or disassemble.
Incompatible Materials:	Not Applicable
Hazardous Decomposition	Combustible vapors may be released if exposed to fire.
Products:	



MSDS

Print Date: 24/03/2022 Version: 1.0

Revision Date: 24/03/2022

Section 11 – Toxicological Information

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Inhalation:	Toxicity data and effects of inhalation exposure are not available. Not a likely
Ingestion:	Route of exposure under normal use. Toxicity data and effects of ingestion exposure are not available. Not a likely
Skin Contact:	Route of exposure under normal use. Toxicity data and effects of skin contact exposure are not available. Not a likely
Eye Contact:	Route of exposure under normal use. Toxicity data and effects of eye contact exposure are not available. Not a likelyroute of exposure under normal use.
Other Toxicity and Effect Information:	
Irritation:	Risk of irritation only occurs if battery cells are mechanically, thermally or electrically damaged and the enclosure is compromised. If this occurs, irritation
Neurological Effects:	To the skin, eyes, and respiratory tract may occur. No information is available at this time.
Sensitization:	The nervous system and organs may be sensitized by exposure to a damaged or
	Compromised battery cell enclosure.
Teratogenicity:	No information is available at this time.
Reproductive Toxicity:	No information is available at this time.
Mutagenicity (Genetic Effects):	No information is available at this time.
Toxicologically Synergistic	No information is available at this time.
Materials: Carcinogenicity:	Normal use will not result in exposure to substances that are considered
carcinogenicity.	Normal use will not result in exposure to substances that are considered
	humancarcinogens by IARC (International Agency for Research on
	Cancer), ACGIH (American Conference of Governmental Industrial
	Hygienists), OSHA or NTP
	(National Toxicology Program).

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Section 12 – Ecological Information

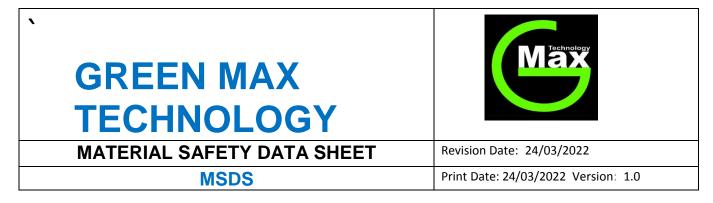
Bioaccumulative potential:	Not available
Persistence and degradability	Not available.
Mobility:	Not available.
Ecotoxicity:	Not Available
Other Adverse Effects:	Not available.

Section 13 – Disposal Considerations

Waste Disposal Method:	Recycling is encouraged. Do NOT dump into sewage or
	Water bodies.
	Disposeof in accordance with local, state and federal laws and
	Regulations.
Special Precautions:	Discharge batteries fully and cap
opecial recoucions.	Terminals before disposal. Handle
	according toSection 7 and Section 8
	To minimize exposure.

Section 14 – Transport Information

Trojan Battery products listed in Section 1 are designed to comply with standard international shipping regulations including the UN Recommendations on the Transport of Dangerous Good; the IA Dispose of in accordance with local, state and federal laws and regulations.



TA Dangerous Goods Regulations; the International Maritime Dangerous Goods Code; and the US DOT Regulations for the safe transportation of lithium batteries.`

ICAO Classification:	International Civil Aviation Organization)
UN Number:	UN3480
UN Proper Shipping Name:	LITHIUM ION BATTERIES
Transport Hazard Class:	Class 9
Notes and Exceptions:	Packaging, markings, and documentation requirements are defined in the International Air Transport Association (IATA) Dangerous Goods Regulations (DGR) Packing Instructions 965.
	In some cases, excepted cells and batteries are allowed to be transported internationally without Class 9 packaging and in some circumstances markings, but must conform to other requirements as stipulated in Packing Instructions 965 of the IATA DGR.
IMDG Classification:	(International Maritime Dangerous Goods)
UN Number:	UN3480
UN Proper Shipping Name:	LITHIUM ION BATTERIES
Transport Hazard Class:	Class 9
Notes and Exceptions:	Packaging, markings, and documentation requirements are defined in the IMDG code Packing Instructions P903.
	In some cases, excepted cells and batteries are allowed to be transported internationally without Class 9 packaging and in some circumstances markings, but must conform to Special Provision 188 under the IMDG code.
U.S. HMR Classification:	(United States Hazardous Materials Regulations)
UN Number:	UN3480
UN Proper Shipping Name:	LITHIUM ION BATTERY
Transport Hazard Class:	Class 9
Notes and Exceptions:	Packaging, markings, and documentation requirements are defined in Title 49 of the Code of Federal Regulations (CFR), Section 173.185. of the U.S. HMR.

GREEN MAX TECHNOLOGY

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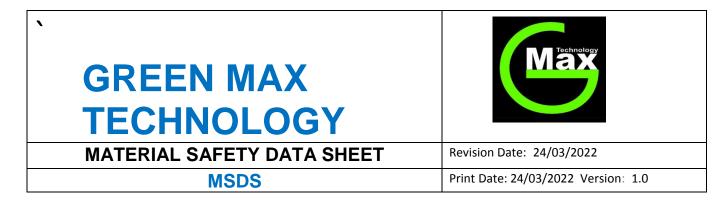
MATERIAL SAFETY DATA SHEET	Revision Date: 24/03/2022
MSDS	Print Date: 24/03/2022 Version: 1.0

In some cases, excepted cells and batteries are allowed to be transported within the US without Class 9 packaging and markings, but must conform to other

requirements as stipulated in the 49 CFR Section 173.185(c) of the U.S. HMR.

Section 15 – Regulatory Information

OSHA HCS EPA TSCA Status:	This SDS complies with requirements of the Hazard Communication Standard (HCS) 29 CFR 1910.1200(g) and Appendix D. All ingredients in the product are listed on the TSCA inventory.
Sec. 302/304:	None
Sec. 311/312:	None
Sec. 313: California Prop 65:	None This product does not contain chemicals known to the State of California tocause cancer or reproductive toxicity.
Canada	This product has been classified in accordance with the hazard criteria of theControlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.
WHMIS Classification:	Not Controlled
New Substance Notification Regulations:	All ingredients in the product are listed, as required, on Canada's Domestic Substance List.
Classification / Symbol:	This product is not classified as hazardous according to Regulation (EC) 1272/2008.



Disclaimer:

No warranty, expressed or implied, or merchantability, fitness for a particular purpose or otherwise is made, except that the products herein discussed comply with the chemical description on the labels. Buyer assumes risks of the use, storage and handling. Green Max Technology shall not be liable for any incidental or consequential damages arising directly or indirectly in connection with the purchase, use, storage or handling of this product. The information contained herein is, to the best of our knowledge, true and accurate. However, all recommendations or suggestions are made without guarantee, since the conditions of use are beyond our control. We disclaim any liability incurred in connection with the use of these data or suggestions. This information is not to be taken as a license to operate under, or a recommendation to infringe any patent(s). The observance of all regulations and patents is the responsibility of the user. No agent, representative or employee of this company is authorized to vary any terms of this notice.

