

MSDS Battery BAT & LINK PMVR.348290.001

SAFETY DATA SHEET version 1

01/27/2020

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY OR THE SUPPLIER	
Trade name	Battery BAT & LINK PMVR.348290.001
article number	
Registration number (REACH)	This information is not available
EC number	is absent
CAS number	is absent
The corresponding set of the substance or mixture and contraindications	
Installed applications:	Designed to power portable equipment DC voltage of 12 volts.
Details of the supplier of the safety data sheet	
Limited Liability Company "LiFors"	
Mailing address: 634055, Tomsk, Tomsk g, Vavilova St., Building 10a Legal address: 634055, Tomsk, Tomsk g, Vavilova St., Building 10a	
Telephone:	+7 (3822) 445533
Fax machine:	
Email:	support@li-force.ru
Web site:	li-force.ru
Emergency numbers	03 medical emergency 01 fire service
Emergency Information Service	+7 (3822) 445533
2. Identification of danger (s)	
2.1 Classification of the substance or mixture	
Classification in accordance with Regulation (EC) № 1272/2008 (CLP)	
In accordance with Article 3 (3) REACH active product (the data products) is (are) product. For products not applied mandatory labeling stipulated by the law on hazardous substances. This product is not classified as hazardous to health or the environment in accordance with the Regulations on the classification, labeling and packaging of substances and mixtures (CLP).	
remarks	
Full text of Hazard - Hazard and EU statements: see section 16.	
2.2 Label elements	
Labeling in accordance with Regulation (EC) № 1272/2008 (CLP)	
Signal word Is absent	
Hazard	

is absent

Precautionary measures

Precautions - ReAKtsia

is absent

2.3 Other hazards

Composite Battery substances are in sealed cells, the performance of which provides resistance to the effects of various temperatures and pressures under normal operating conditions. Moreover, thanks to this construction, during normal operation protected from fire or explosion and prevents leak of the aforementioned substances.

In the case of the resolution of the battery body is released composite materials.

3.Composition (INFORMATION ON INGREDIENTS)

3.1 Substances

Lithium	
EC number	231-102-5
CAS number	7439-93-2
iron phosphate	
EC number	233-149-7
CAS number	10045-86-0

4. MEASURES FOR FIRST AID

4.1 Description of first aid measures

After inhalation

Supply fresh air or oxygen; call for doctor.

Upon contact with skin

Not assumed.

Eye Contact

Not assumed..

If swallowed,

Not assumed.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects known to date

4.3 Indication of immediate medical attention and special treatment

Is absent

5. MEASURES AND FIRE-FIGHTING

5.1 Extinguishing media

Suitable extinguishing means

CO2, powder extinguishing agent or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media

There are no

5.2 Special hazards arising from the substance or mixture

Upon heating or in case of fire, the formation of toxic gases

Hazardous combustion products

In case of fire: toxic gases

5.3 Advice for firefighters

Fight fire from a distance, observing the usual precautions. Wear self-contained breathing apparatus.

6. MEASURES FOR THE PREVENTION AND ELIMINATION OF ACCIDENTAL AND THEIR CONSEQUENCES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

The wearing of suitable protective equipment (including personal protective equipment specified in Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

Do not breathe dust. Avoid contact with skin, eyes and clothing

6.2 Environmental precautions

Do not allow to penetrate the ground / soil.

6.3 Methods and materials for cleaning

Advice on how to prevent leakage

Not required

Tips on how to clean up the leak

Pick up mechanically.

Other information relating to spills and releases

Put into suitable containers for disposal.

Reference to other sections

Hazardous products of combustion: see section 5. Personal protective equipment: see section 8.

Incompatible materials: see section 10. Disposal: see section 13.

7.PRAVILA STORAGE OF CHEMICALS and handling during loading and unloading

operations

7.1 Precautions for safe handling

Avoid saturation of the battery cells with water (sea water).
Do not expose to strong oxidizers.
Do not throw. Avoiding mechanical (shock) loads.
Do not disassemble, modify the unit, do not deform.
Avoid contact with the positive and negative poles of the electrically conductive material.
Used for charging and discharging only the prescribed chargers and tools.

industrial hygiene advice

Before breaks and after work wash your hands. Keep away from food, drink and animal feed.

7.2 Conditions for safe storage, including any incompatibilities

Avoid exposure to direct sunlight, high temperatures and high humidity. Store in a cool place.
Storage temperature: -20 to 60 ° C. Allowable humidity: 45-85%.

Incompatible substance or mixture

Keep away from water.
Do not store together with conductive materials

Consideration of other tips

Do not store in locations subject to static discharges.
Protect from heat and direct sunlight.
Protect from humidity and water.

7.3 Specific (s) is finite (s) use (s) of

Used only for its intended purpose; See. Operating Instructions.

8. CONTROLS EXPOSURE AND PERSONAL PROTECTION

8.1 Engineering controls: Do not store the batteries away from sources of heat and open flames.

Store in a cool, dry place.

8.2 Personal protective equipment:

Respirator: In normal operation is not required. In the case of a fire requires autonomous HDA. Eye / face protection: In compliance with safety regulations is required.

gloves: Not required when working with batteries.

Foot protection: Not required

9. PHYSIOCHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

MSDS Battery BAT & LINK PMVR.348290.001

SAFETY DATA SHEET version 1

01/27/2020

State of aggregation	a firm
Smell	without smell
odor threshold	no data available
Other physical and chemical parameters	
pH (value)	not applicable
Density at 20 ° C	not applicable
Melting point / freezing	no data available
Initial boiling point and boiling range	no data available
Flash point closed cup	not applicable
evaporation rate	no data available
Flammability (solid gas)	not applicable
<u>explosive limits</u>	
• lower explosion limit (LEL)	This information is not available
• upper explosion limit (UEL)	This information is not available
Explosive limits of dust clouds	This information is not available
vapor pressure	This information is not available
vapor density	This information is not available
bulk density	This information is not available
Relative density	This information is not available
<u>Solubility (u)</u>	
Solubility in water	not applicable
<u>distribution factor</u>	
n-octanol / water (log KOW)	This information is not available
ignition point	This information is not available
Autoignition Temperature.	This information is not available
decomposition temperature	This information is not available
Viscosity	This information is not available
Risk of explosion	This information is not available
oxidising properties	This information is not available
9.2 Other information	
No further information	
10. Stability and Reactivity	
10.1 Reactivity: Comment	

MSDS Battery BAT & LINK PMVR.348290.001

SAFETY DATA SHEET version 1

01/27/2020

10.2 Incompatibility with other substances:In normal operation, no. Avoid exposure to heat, open flame and corrosive substances.

10.3 The conditions of action that should be avoided:Avoid exposure to heat and flames. Avoid puncturing or crushing, or burn batteries.

11. TOXICOLOGICAL INFORMATION

With proper handling and use of this product does not show toxicity. Signs and symptoms: No, if the battery is not destroyed.

Excessive exposure may cause symptoms of non-fibrous tissue of the lungs and irritation of mucous membranes.

Inhalation: Lung irritation.

Skin contact: Skin irritation

Eye contact: eye irritation

Ingestion: Ingestion tissue damage larynx and gastrointestinal tract.

Medical conditions generally exacerbated when exposed to: In the case of impact on the body internal battery contents can eczema, skin allergy, lung, asthma and other respiratory diseases.

12. INFORMATION ON ECOLOGICAL

12.1 Toxicity

Aquatic:

No further relevant information available.

Persistence and degradability:

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential:

No further relevant information available.

Mobility in soil:

No further relevant information available.

Additional ecological information:

General information:

Do not expose the battery cells served in the ground.

Perhaps their corroding and electrolyte leakage.

The results of evaluation of PBT (bioaccumulative stable toxic substance) and vPvB (bioaccumulative very stable substance)

PBT: Not applicable.

MSDS Battery BAT & LINK PMVR.348290.001

SAFETY DATA SHEET version 1

01/27/2020

vPvB: Not applicable.

Other adverse effects:

No further relevant information available.

13. DISPOSAL CONSIDERATIONS (EWC)

13.1 Waste treatment methods

Dispose of batteries in accordance with national regulations or return used batteries to the manufacturer.

Dispose of the packaging in accordance with the instructions on the disposal of packaging materials.

Disposal of wastewater - current information

The sewers are not drained.

13.2 Notes

There are no

14. INFORMATION (air transport)

14.1 UN number	(Not subject to transport regulations)
14.2 UN proper shipping name	it does not matter
14.3 Class (es) during transport	it does not matter
class	-
14.4 packing group	it does not matter
14.5 environmental hazards	offline (not dangerous for the environment acc. to technical regulations)
14.6 Special precautions for user	
No additional information.	
14.7 Transportation of containers in accordance with Annex II of MARPOL 73/78 and IBC Code	
Cargo for carriage in bulk.	
14.8 Information on each of the UN Model Regulations	
• Transport of dangerous goods by road, rail and inland waterway (ADR / RID / ADN)	
Not subject to ADR, RID and ADN.	
• International Maritime Dangerous Goods (IMDG)	
It is not subject to the IMDG Code.	
• International Air Transport Association (ICAO-IATA / DGR)	
It is not subject to ICAO-IATA.	

15. INFORMATION ON NATIONAL AND INTERNATIONAL LAW**15.1 Safety, health and environmental laws / regulations specific for the substance or mixture****The relevant provisions of the European Union (EU)**

- **Regulation 649/2012 / EC on the export and import of hazardous chemicals (PIC)**

not listed

- **Regulation 1005/2009 / EC on substances that deplete the ozone layer (ODS)**

not listed

- **Regulation 850/2004 / EC on persistent organic pollutants (POPs)**

not listed

- **Restrictions under REACH, Annex XVII**

not listed

- **List of substances subject to authorization (REACH, Appendix XIV)**

not listed

- **Directive 2011/65 / EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) - Annex II**

not listed

- **Regulation 166/2006 / EC establishing the European Release and Transfer Registers (PRTR)**

not listed

- **Directive 2000/60 / EC establishing a framework for Community action in the field of water policy (WFD)**

not listed

national regulations

The substance is included in the following national regulations:

- EINECS / ELINCS (Europe)

15.2 Chemical Safety Assessment

None of the chemical safety assessment was not carried out for this substance.

16. ADDITIONAL INFORMATION

Abbr.	Descriptions of the abbreviations used
CAS	Chemical Abstracts Service (a service that supports the most comprehensive list of chemicals)
CLP	Regulation (EC) № 1272/2008 on the classification, labeling and packaging of substances and mixtures

MSDS Battery BAT & LINK PMVR.348290.001

SAFETY DATA SHEET version 1

01/27/2020

CMR	Carcinogenic, mutagenic or toxic to the reproductive system
DGR	Transport of Dangerous Goods Regulations (see IATA / DGR)
DMEL	The resulting minimal effect level
DNEL	The resulting minimal effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European Inventory of identified chemicals
IATA	International Air Transport Association
IATA / DGR	Regulations transport of dangerous goods (DGR) for Air Transport (IATA)
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. Of "Marine Pollutant)
NLP	Longer polymer
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Target concentration without affecting
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals
vPvB	Very persistent and very bioaccumulative
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
ICAO	International civil aviation organization
IMDG	The international code for the transport of dangerous goods by sea
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations of the International Carriage of Dangerous Goods by Rail)
GHS	The Globally Harmonized System of Classification and Labeling of Chemicals "developed by the United Nations
Key literature references and sources of data	
- Regulation (EC) № 1907/2006 (REACH), as amended by 453/2010 / EC	
- Regulation (EC) № 1272/2008 (CLP, EU GHS)	

List of relevant R-phrases (full text of the Code and, as mentioned in chapter 2 and 3)

is absent

Renunciation

The information contained in this material safety data sheet corresponds to the level of knowledge at the moment and the current legislation. Material Safety Data Sheet contains reference data for health security, health and the environment during use of the product; it is in any case does not contain any guarantees concerning technical characteristics or fitness for a particular use conditions

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