



SPARKY

Li- ion battery <100 Wh

Safety information for Lithium-Ion batteries

Date of issue: 26/07/2017 Revision date : 26/07/2017 Supersedes:

Version: 0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name	BL 1115; BL 1120; BL 1420; BL 1440; BL 1820; BL 1840
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Relevant identified uses of the substance or mixture and uses advised against

Rechargeable Lithium Ion battery for power tools

Manufacturer/Supplier

Manufacturer	Department issuing data specification sheet
SPARKY ELTOS AD, 9, Koubrat Str., 5500 LOVECH, Bulgaria Tel: 068 / 600 550 Fax: 068 / 600 580, 600 590	SPARKY ELTOS AD, TECHNICAL PRODUCTION DIRECTORATE 9, Koubrat Str., 5500 LOVECH, Bulgaria Tel: 068 / 600 550 Fax: 068 / 600 580, 600 590

SECTION 2: Hazards identification

For the battery chemical materials are stored in a hermetically sealed metal case, designed to withstand Temperatures and pressures encountered during normal use. As a result, during normal use there is no physical danger of ignition or explosion and chemical danger of hazardous materials leakage.

It may cause heat generation or electrolyte leakage if battery terminals contact with other metals. Electrolyte is flammable. In case of electrolyte leakage move the battery from fire immediately.

However if exposed to a fire, added mechanical shocks, decomposed, added electric stress by miss-use, the gas release vent will be operated. The battery case will be breaked at the extreme, hazardous materials may be released.

Moreover, if heated strongly by a surrounding fire, acrid gas may be emitted.

SECTION 3: Composition/ information on ingredients

Composition/information on ingredients

Lithium Ion rechercheable battery :

Trade name	Energy content (Wh)
BL 1115	16,2
BL 1120	21,6
BL 1420	28,8
BL 1440	57,6
BL 1820	36
BL 1840	72

Hazardous components

	Chemical name	CAS No.	% by weight
Electrolite	Contains Electrolyte salt and solvents.		3-16
Electrolite salt	Lithium hexafluorophosphate	21324-40-3	0,03-4
Electrolite solvent	Includes one or more of the following;	96-49-1 108-32-7	3-16



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	Chemical name	CAS No.	% by weight
	Ethylene Carbonate Propylene Carbonate Diethyl Carbonate	105-58-8	
PVDF	Polyvinylidenefluoride	24937-79-9	< 0,8
Copper	Cu	7440-50-8	2-12
Aluminium	Al	7429-90-5	1,3-8
Cathode	Lithium cobalt oxide	12190-79-3	12-39
Anode	Graphite	7782-42-5	6-23
Steel, Nickel and inert components.		Various	Balance

During charge process a lithium graphite intercalation phase is formed

The physical form of the product, however, precludes exposure to workers under normal conditions of use.

SECTION 4: Finds aid measured

Description of first aid measures

First-aid measures general	If the electrolyte is leaking out of the battery pack, the following measures have to be taken.
First-aid measures after inhalation	Assure fresh air breathing. Allow the victim to res
First-aid measures after skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact	Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persists.
First-aid measures after ingestion	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms/effects	Not expected to present a significant hazard under anticipated conditions of normal use.
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Indication of any immediate medical attention and special treatment needed

Treat symptomatically

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	Do not use a heavy water stream.

Special hazards arising from the substance or mixture

No additional information available.

Advice for firefighters

Firefighting instructions	Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
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Protection during
firefighting

Do not enter fire area without proper protective equipment, including
respiratory protection.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

General measures No flames, no sparks. Eliminate all sources of ignition. Isolate from fire, if possible, without unnecessary risk.

For non-emergency personnel

Emergency procedures Evacuate unnecessary personnel.

For emergency responders

Protective equipment Equip cleanup crew with proper protection.
Emergency procedures Ventilate area.

Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up

Methods for cleaning up Take up liquid spill into absorbent material.
Other information Dispose of materials or solid residues at an authorized site.

SECTION 7: Handling and storage

Precautions for safe handling

Precautions for safe handling Do not soak in water or seawater.
Do not expose to strong oxidizers.
Do not give a strong mechanical shock or fling.
Never disassemble, modify or deform.
Do not connect the positive terminal to the negative terminal with electrically conductive material.
Use only the chargers / electric tools specified by the manufacturer to charge or discharge the battery.
Do not throw into fire or expose to high temperatures (>60 °C).
Do not connect the positive terminal to the negative terminal with electrically conductive material.

Hygiene measures Always wash hands after handling the product.

Conditions for safe storage, including any incompatibilities

Storage conditions Avoid direct sunlight, high temperature, high humidity.
Store in a cool place (temperature: -20 °C ~ 40 °C, humidity: 45 - 85%).

Incompatible products Strong bases. Strong acids.

Incompatible materials Sources of ignition. Direct sunlight.

Storage temperature -20 - 40 °C

Prohibitions on mixed storage Store away from water.
Do not store together with electrically conductive materials.

The accu-pack should be stored at 30 to 50% of the charging capacity.
Avoid storing in places where it is exposed to static electricity.



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SECTION 8: Exposure controls/personal protection

Exposure controls

Appropriate engineering controls

If the electrolyte is leaking out of the battery pack, the following measures have to be taken.

Personal protective equipment

Avoid all unnecessary exposure.

Hand protection

Wear protective gloves

Type	Material	Permeation	Thickness (mm)	Standard
Disposable gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,12	EN 374

Eye protection

Chemical goggles or safety glasses



Other information

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance

plastic case.

Colour

Black.

Explosive properties

Risk of explosion by shock, friction, fire or other sources of ignition.

Other information

No additional information available

SECTION 10: Stability and reactivity

Reactivity

No additional information available

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Heating may cause a fire or explosion.

Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Water, humidity.

Incompatible materials

Conductive materials, water, seawater, strong oxidizers and strong acids.

Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.



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SECTION 11: Toxicological information

Information on toxicological effects

Potential adverse human health effects and symptoms

This product contains an organic electrolyte. If the electrolyte is leaking out of the battery pack, the following effects are known when getting into contact: Irritation: severely irritant to eyes. Irritation: may cause irritation to the respiratory system.

Other information

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 12: Ecological information

Additional information

Do not allow battery packs to penetrate the soil.

The battery cell may corrode and electrolyte may leak.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

Dispose in a safe manner in accordance with local/national regulations. Refer to manufacturer/supplier for information on recovery/recycling.

Ecology - waste materials

Avoid release to the environment.





European List of Waste (LoW) code

16 06 05 - other batteries and accumulators

20 01 34 - batteries and accumulators other than those mentioned in 20 01 33

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	RID
UN number			
3480	3480	3480	3480
UN proper shipping name			
LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	Lithium ion batteries	LITHIUM ION BATTERIES
Transport document description			
UN 3480 LITHIUM ION BATTERIES, 9, (E)	UN 3480 LITHIUM ION BATTERIES, 9		
Transport hazard class(es)			
9	9	9	9
			
Packing group			
Not applicable	Not applicable	Not applicable	Not applicable
Environmental hazards			
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available			



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Special precautions for user

- Overland transport

Classification code (ADR)	M4
Special provisions (ADR)	188, 230, 636b, 376, 377
Limited quantities (ADR)	0
Packing instructions (ADR)	P903, P908, P909
Tunnel restriction code (ADR)	E

- Transport by sea

Special provisions (IMDG)	188, 230b, 376, 377
Limited quantities (IMDG)	0
Packing instructions (IMDG)	P903, P908, P909
EmS-No. (Fire)	F-A
EmS-No. (Spillage)	S-I
Stowage category (IMDG)	A
MFAG-No	147

- Air transport

PCA packing instructions (IATA)	965
PCA max net quantity (IATA)	5kg
CAO packing instructions (IATA)	965
Special provisions (IATA)	A88, A99, A154, A164, A183

- Rail transport

Special provisions (RID)	188, 230, 636b, 376, 377
Limited quantities (RID)	0
Packing instructions (RID)	P903, P908, P909
Carriage prohibited (RID)	No

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No additional information available

SECTION 15: Regulatory information

No additional information available

SECTION 16: Other information

Indication of changes:

Safety information for Lithium-Ion batteries

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product