

Report No.: MDIZER5N30839716

MSDS Report

Sample Description

& Model

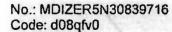
Lithium-ion Battery 18650

Applicant

Carl Walther GmbH

Address

Donnerfeld 2, 59757 Arnsberg, Deutschland





www.ponylest.com

CHotline 400-819-5688

C 17 11 25 (C) 10221 27360230

ducker (the society which is and selected the control of the contr 者《安徽文》。105327857866666 《连次的文》。16411 84656826 《李宗宗》中,16554489776419 《明明教皇》。1620年69224318

据据信贷中,1957 (1957) (195

MONTH OF THE YOU

Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 1 of 14

Material Safety Data Sheet

Reference to ST/SG/AC.10/30/Rev.6 (GHS)

Section 1 - Chemical Product and Company Identification

Chemical product identification

Sample Description: Lithium-ion Battery

Sample Model: 18650

Recommended Uses: Flashlight

Restrictions on use: N/A

Address: 06C-1, Zhongshan Huoju (Yangxi) Industry Zone, Yangxi, Guangdong, China

Phone number: 02932-638 01

FAX: 02932-638 244

E-mail: verkau/@umarex.de

Emergency phone number: 02932-638 01

Section 2 - Hazards Identification

Emergency overview: This product is an article which contains a chemical substance. Safety information is given for exposure to the article as sold. Intended use of the product should not result in exposure to the chemical substance. This is a battery. In case of rupture: the below hazards exist.

CAS# 1333-86-4

Classification according to GHS

Carcinogenicity (2)

Specific target organ toxicity, repeated exposure (1) (lung)

Label elements

Hazard pictogram(s):



Signal word:

Danger

Hazard statement(s):

H351 Suspected of causing cancer

H372 Causes damage to organs through prolonged or repeated exposure (lung)

www.ponytest.com

CHotline 400-819-5688

的潮行分配。1824年2月36日第一 压模点是湿。 医初光的结构

元子类元字。(1965年1973年 - 人有类类学、山村1 88150000 - 广省支管论、(021) 16851999 - 深热实验学。(025) 26050000 actual of comments of the commentation of the comments of the commentation of the commentation of the comments of the comments

- 大型的原子。0000年8月18日 - 10年6月18日 - 1051118日2119096 - 東次本版系。0051181881121 · 1000年11月,1987年16月14日17日 - 1987年16日日,10512162997904 項目的特別,1999年15年8日18





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 2 of 14

Pony Testing International Group

Precautionary statement(s):

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves, protective clothing, eye protection and face protection.

P260 Do not breathe dust.

P264 Wash skin and clothing thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

Response:

P308 + P313 IF exposed or concerned: Get medical advice.

P314 Get medical advice if you feel unwell.

Storage

P405 Store locked up.

Disposal:

P501 Contents handling to approved waste treatment plants.

CAS# 616-38-6

Classification according to GHS

Flammable liquids (2)

Specific target organ toxicity, single exposure; Narcotic effects (3)

Reproductive toxicity (2)

Label elements

Hazard pictogram(s):







Signal word:

Danger

Hazard statement(s):

H225 Highly flammable liquid and vapour

H336 May cause drowsiness or dizziness

H361 Suspected of damaging fertility or the unborn child

Precautionary statement(s):

Prevention:

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof equipment.



<u>.</u>

ì



Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 3 of 14

Pony Testing International Group

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P280 Wear protective gloves, protective clothing, eye protection and face protection.

P261 Avoid breathing gas, mist, vapours and spray.

P271 Use only outdoors or in a well-ventilated area.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

Response:

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water.

P370 + P378 In case of fire: Use the appropriate media put out the fire.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor, if you feel unwell.

P308 + P313 IF exposed or concerned: Get medical advice.

Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Contents handling to approved waste treatment plants.

CAS# 7440-50-8

Classification according to GHS

Specific target organ toxicity, single exposure; Respiratory tract irritation (3)

Specific target organ toxicity, repeated exposure (1) (liver)

Hazardous to the aquatic environment, long-term hazard (3)

Label elements

Hazard pictogram(s):





Signal word:

Danger

Hazard statement(s):

H335 May cause respiratory irritation

H372 Causes damage to organs through prolonged or repeated exposure (liver)

H412 Harmful to aquatic life with long lasting effects

Precautionary statement(s):

各籍电影火。1664自666486。



į



Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 4 of 14

Pony Testing International Group

Prevention:

P271 Use only outdoors or in a well-ventilated area.

P260 Do not breathe dust.

P264 Wash skin and clothing thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

Response:

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor, if you feel unwell,

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Contents or container handling to approved waste treatment plants.

CAS# 7429-90-5

Classification according to GHS

Specific target organ toxicity, repeated exposure (1) (Lung)

Hazardous to the aquatic environment, long-term hazard (4)

Label elements

Hazard pictogram(s):



Signal word:

Hazard statement(s):

H372 Causes damage to organs through prolonged or repeated exposure (Lung)

H413 May cause long lasting harmful effects to aquatic life

Precautionary statement(s):

Prevention:

P260 Do not breathe dust.

P264 Wash skin and clothing thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

Response:

P314 Get medical advice if you feel unwell.

Storage

None.

Disposal:

1587 F4 A) 1000116694166

深間電鈴幣: 前7551 26851900V 万种实验室。2022/27360730 人民发兵员。1041年8669480 民种党领域。1057118/221696 战役实验院,4027年8997457 常中共加坡。0371959359670 - 范州共为4。40212762997900 - 成门水放弃。1059215568048





Report No.: MDIZER5N30839716 Date: 01,11,2016 Page 5 of 14

Pony Testing International Group

P501 Contents handling to approved waste treatment plants.

CAS# 7440-02-0

Classification according to GHS

Sensitisation, respiratory (1)

Sensitisation, skin (1)

Carcinogenicity (2)

Specific target organ toxicity, repeated exposure (1) (respiratory system)

Hazardous to the aquatic environment, long-term hazard (4)

Label elements

Hazard pictogram(s):





Signal word:

Hazard statement(s):

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317 May cause an allergic skin reaction

H351 Suspected of causing cancer

H372 Causes damage to organs through prolonged or repeated exposure (respiratory system)

H413 May cause long lasting harmful effects to aquatic life

Precautionary statement(s):

Prevention:

P284 [In case of inadequate ventilation] wear respiratory protection.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves, protective clothing, eye protection, face protection.

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust.

P264 Wash skin and clothing thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

Response:

P304 + P340 IF INHALED: remove person to fresh air and keep comfortable for breathing.

P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P302 + P352 IF ON SKIN: Wash with plenty of water.

P333 + P313 If skin irritation or rash occurs: Get medical advice.

P321 Specific treatment.





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 6 of 14

Pony Testing International Group

P362 + P364 Take off contaminated clothing and wash it before reuse.

P308 + P313 IF exposed or concerned: Get medical advice.

P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor.

P314 Get medical advice if you feel unwell.

Storage

P405 Store locked up.

Disposal:

P501 Contents or container handling to approved waste treatment plants.

Other hazards

Physical and chemical hazards: See Section 10

Human health hazards: See Section 11 Environmental hazards: See Section 12

Section 3 - Composition/Information on Ingredients

Chemical characterization: Mixture

Chemical Composition	CAS No.	EC#	Weight (%)
Cobaltate, lithium	12190-79-3	235-362-0	34.76
Graphite	7782-42-5	231-955-3	16.35
Carbon black	1333-86-4	215-609-9	7,91
Rubber, styrene-butadiene, fume	61789-96-6	612-382-1	3.47
Phosphate(1-), hexafluoro-, lithium	21324-40-3	244-334-7	10.78
Carbonic acid, ethyl methyl ester	623-53-0	613-014-2	4.22
Carbonic acid, dimethyl ester	616-38-6	210-478-4	3.14
Copper	7440-50-8	231-159-6	8.29
Aluminum	7429-90-5	231-072-3	3,67
Nickel	7440-02-0	231-111-4	1,22

Section 4 - First Aid Measures

Description of first aid measures



www.ponytest.com

CHothne 400-819-5688

大計可發金。1022927360730 和44年的学。1999(16)184186。

元章以1955、(2010) 2011年166 - 長春安安武,611年11月18日110 - 五海雷蒙海,1021年64851100 - 超剛東影響。10755-26050999 在在水柱等。19552/88706866 - 新加州在美国市,1964-1988/194866 PRETER 在 1967-4487736499 - 广西美美丽 4020/89224340

三角工作(b) 40411(x4450826 | 据图集序(b) 4987(\$87219096 | 異成集級型: 4937(89497)27

- 平年3月15日 - 1077[169] 56670 - 有形美效素。10512142997900 - 東日大勢電。1059215568818





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 7 of 14

General information No special measures required.

After eye contact

Flush eyes with plenty of water for several minutes while holding eyelids open. Get medical attention if irritation persists.

After skin contact

Remove contaminated clothing and shoes. Immediately wash with water and soap and rinse thoroughly. Wash clothing and shoes before reuse. If irritation occurs, get medical attention.

After inhalation

Remove victim to fresh area. Administer artificial respiration if breathing is difficult. Seek medical attention.

After swallowing

Do not induce vomiting. Get medical attention.

Personal protective equipment for first-aid responders: No data available.

Most important symptoms/effects, acute and delayed: No data available.

Indication of immediate medical attention and special treatment needed: No data available.

Section 5 - Fire Fighting Measures

Suitable extinguishing media:

Use extinguishing agent suitable for local conditions and the surrounding environment. Such as dry powder, CO2.

Unsuitable extinguishing media:

No data available.

Specific Hazards arising from the chemical:

Special hazards arising from the substance or mixture

Battery may burst and release hazardous decomposition products when exposed to a fire situation. Lithium Ion batteries contain flammable electrolyte that may vent, Ignite and produce sparks when subjected to high temperature(>150°C(302°F)), when damaged or abused (e.g. mechanical damage or electrical overcharging); may burn rapidly with flare-burning effect; may ignite other batteries in clothes proximity.

Specific protective actions for fire-fighters:

Protective equipment: Wear self-contained respirator. Wear fully protective impervious suit.

Section 6 - Accidental Réléase Measures

Personal precautions:



www.ponytest.com

先进中的社。6022127360230。

性病医综合。109/174684186

CHotline 400-819-5688

在华美教堂,195321887的866。 杭东岛亚强军,0451788的4561 字经重要率。(0574)87736469。广州美教学,(020)89224340

FI TEST, autrischensen berteine, (0571) 872 (1996 biskung, (027) 85997 (27

社司完全等。10471)40380670 与企业的第一(0812)62997900 现门的规定。(0892)3368048

京馬出動室。107559 Z6050909

Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 8 of 14

Pony Testing International Group

Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation Protective equipment:

No data available.

Emergency procedures:

Remove Ignition sources, evacuate area. Sweep up using a method that does not generate dust. Collect as much of the spilled material as possible, placed the spilled material into a suitable disposal container. Keep spilled material out of sewers, ditches and bodies of water.

Environmental precautions:

Do not allow material to be released to the environment without proper governmental permits.

Methods and materials for containment and cleaning up:

All waste must refer to the United Nations, the national and local regulations for disposal.

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

Section 7 - Handling and Storage

Precautions for safe handling:

Consumption of food and beverage should be avoided in work areas.

Wash hands with soap and water before eating, drinking.

Ground containers when transferring liquid to prevent static accumulation and discharge.

Information about fire and explosion protection

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

Conditions for safe storage, including any incompatibilities:

Requirements to be met by storerooms and receptacles

Store in a cool, dry, well-ventilated place.

Information about storage in one common storage facility

Keep away from heat, avoiding the long time of sunlight.

Further information about storage conditions

Keep container tightly sealed.

Specific and use

No data available.

Section 8 - Exposure Controls/Personal Protection





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 9 of 14

Control parameters

CAS No.	ACGIH	NIOSH	OSHA
12190-79-3	N/A	N/A	N/A
7782-42-5	TLV-TWA 2mg/m ³	REL-TWA 2.5mg/m³	PEL-TWA 15mppcf PEL-TWA 20mppcf
1333-86-4	TLV-TWA 3.5mg/m ³	REL-TWA 3.5mg/m ³	PEL-TWA 3.5mg/m ³
61789-96-6	N/A	N/A	N/A
21324-40-3	N/A	N/A	N/A
623-53-0	N/A	N/A	N/A
616-38-6	N/A	N/A	N/A
7440-50-8	TLV-TWA 0.2mg/m ³ TLV-TWA 1mg/m ³	REL-TWA 1mg/m ³ REL-TWA 0.1mg/m ³	PEL-TWA 0.1mg/m ³ PEL-TWA 1mg/m ³
7429-90-5	TLV-TWA 10mg/m ³ TLV-TWA 5mg/m ³	REL-TWA 2mg/m ³ REL-TWA 5mg/m ³ REL-TWA 10mg/m ³	PEL-TWA 5mg/m ³ PEL-TWA 15mg/m ³
7440-02-0	TLV-TWA 1.5mg/m ³	REL-TWA 0.015mg/m ³	PEL-TWA 1mg/m ³

Appropriate engineering controls:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Remove all soiled and contaminated clothing immediately.

Wash hands before breaks and at the end of work.

Personal Protective Equipment

Respiratory protection: Wear suitable protective mask in order to reduce the respiratory system. A large number of leakage, wear chemical protective clothing, including self-contained breathing apparatus.

Hand Protection: Wear appropriate protective gloves to reduce skin contact.

Eyes Protection: Wear safety goggles or eye protection combined with respiratory protection.

Skin and Body Protection: Working environment required, wear suitable protective clothing to minimize contact with skin. The type of protective equipment must be according to the concentration and the content of certain hazardous substances in the workplace.

Section 9 - Physical and Chemical Properties





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 10 of 14

Pony Testing International Group

information on basic physical and chemical properties

Colour: Physical State:

Cylindrical. Odour: Not available.

Odour threshold: Not available.

pH: Not available.

Melting point/freezing point: Not available.

initial boiling point and boiling range: Not available.

Flash Point: Not available.

Evaporation rate: Not available.

Flammability (solid, gas): Not available.

Explosion Limits (vol% in air): Not available.

Vapour pressure, kPa at 20℃: Not available.

Vapor density: Not available.

Density/Relative density (water = 1): Not available.

Solubility(ies): Not available.

Partition coefficient: n-octanol/water: Not available.

Auto-ignition temperature: Not available.

Decomposition temperature: Not available.

Viscosity: Not available.

Other information:

Voltage 3,7V

Electric capacity 2200mAh

Electric Energy 8.14Wh

Section 10 - Stability and Reactivity

Reactivity: No data available. Chemical stability: Stable.

Possibility of hazardous reactions: No data available.

Conditions to Avoid: Flames, sparks, and other sources of ignition, incompatible materials.

Incompatibilities materials: Oxidizing agents, acid, base.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, lithium oxide

fumes.

Section:11 - Texicological Information .



www.nonviest.com

Cliotline 490-819-5688

在安徽的图1 (210) S.D.(S.D.) - 我學家從可以(2411-551500m) - "你实现的(321-621-6215199) 3.27 T. 5250 - (0032) 27340730

在分类等型。1983年8700866 - 经保险工资等。1943 \$810450 172至安徽。1974年777669 - 179安徽 (120)8922410

रेडिकारी हैं। जन्मी (महेबेडिक

- Bire 文化 9: 1617 [164357(67)] - 为 15 支持 161 (10512:162997900 - 夏) [第883] 10592:5588048

大连头音响。1944年846年820 - 1964年83日,1937年82219166 - 武汉家的第三指2018/09/2127





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 11 of 14 Pony Testing International Group

A auta Taviaitu

Acute Toxicity:			
CAS No.	LC50/LD50		
12190-79-3	No data available.		
7782-42-5	No data available.		
1333-86-4	LD50 Rat (oral): 15400mg/kg		
61789-96-6	No data available.		
21324-40-3	No data available.		
623-53-0	No data available.		
616-38-6	LD50 Rat (oral): 6400-12800mg/kg; LC50 Rat (Inhalation: Vapours) ≥140 mg/L		
7440-50-8	No data available.		
7429-90-5	No data available.		
7440-02-0	LD50 Rat (oral): ≥5000mg/kg		

Skin corrosion/irritation: No data available.

Serious eye damage/irritation: No data available. Respiratory or Skin sensitization: No data available.

Germ Cell mutagenicity: No data available.

Carcinogenicity: No data available.

Reproductive toxicity: No data available.

Specific target organ toxicity-Single exposure: No data available. Specific target organ toxicity-Repeated exposure: No data available.

Aspiration hazard: No data available.

Information on the likely routes of exposure: No data available.

Eye: No data available. Skin: No data available. Ingestion: No data available. Inhalation: No data available.

Section 12 - Ecological Information

Ecological Toxicity: No data available.

Persistence and degradability: No data available. Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

CHotline 400-819-5688





Report No.; MDIZER5N30839716 Date: 01.11.2016 Page 12 of 14

Other adverse effects: No data available.

Section 13 - Disposal Considerations

Disposal methods:

Recommendation:

Consult state, local or national regulations to ensure proper disposal.

Uncleaned packaging

Recommendation: Disposal must be made according to official regulations.

Section 14 - Transport Information

UN Number	
-,,	11012400
IATA	UN3480
IMDG	UN3480
Model Regulation	UN3480
UN Proper shipping name	
IATA.	Lithium ion batteries
IMDG	LITHIUM ION BATTERIES
Model Regulation	LITHIUM ION BATTERIES
Transport hazard class(es)	
IATA	9
IMDG	9
Model Regulation	9
Packing group	
IATA	N/A
IMDG	N/A
Model Regulation	N/A
Packaging Sign	
IATA	N/A
IMDG	N/A
Model Regulation	N/A
Environmental hazards	
Marine pollutant:	No ·
Special precautions for user	Not applicable.





Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 13 of 14

Transport information: The Lithium-ion Battery 18650 has passed the test UN38.3, according to the report ID: I04253037421D and I04253037421D~1.

According to the Packing Instruction 965 section II and 966 section II of IATA DGR 57th Edition for transportation.

According to the special provision 188 of IMDG (37-14) or the << Recommendations On The Transport Of Dangerous Goods-Model Regulations>> (19th). The products are not subject to dangerous goods.

Note: Batteries weight in the package < 5kg (By air, Batteries packed with equipment).

Transport Fashion: By air, by sea, by railway, by road.

Section 15 - Regulatory Information

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

CAS No.	TSCA	IECSC	DSL/NDSL	EINECS/ ELINCS/ NLP
12190-79-3	Listed	Listed	Listed DSL	Listed
7782-42-5	Listed	Listed	Listed DSL	Listed
1333-86-4	Listed	Listed	Listed DSL	Listed
61789-96-6	Listed	Listed	Listed DSL	Listed
21324-40-3	Listed	Listed	Listed DSL	Listed
623-53-0	Listed	Listed	Listed DSL	Listed
616-38-6	Listed	Listed	Listed DSL	Listed
7440-50-8	Listed	Listed	Listed DSL	Listed
7429-90-5	Listed	Listed	Listed DSL	Listed
7440-02-0	Listed	Listed	Listed DSL	Listed

Section 16 - Other Information

Issue Time: 2016-01-11

Issue Department: Technical department

Modification record: Notice to reader



Report No.: MDIZER5N30839716 Date: 01.11.2016 Page 14 of 14

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Other Information:

CAS: (Chemical Abstracts Service);

EC: (European Commission);

ACGIH: (American Conference of Governmental Industrial Hygienists); NIOSH: (US National Institute for Occupational Safety and Health);

OSHA: (US Occupational Safety and Health);

TLV: (Threshold Limit Value) TWA: (Time Weighted Average); STEL: (Short Term Exposure Limit); PEL: (Permissible Exposure Level);

REL: (Recommended Exposure Limit);

PC-STEL: (Permissible concentration-time weighted average); PC-TWA: (Permissible concentration-short time exposure limit);

LC50: (Lethal concentration, 50 percent kill);

LD50: (Lethal dose, 50 percent kill);

IARC: (International Agency for Research on Cancer);

EC50: (Median effective concentration);

BCF: (Bioconcentration Factor);

BOD: (Biochemical oxygen demand);

NOEC: (No observed effect concentration);

NTP: (US National Toxicology Program);

RTECS: (Registry of Toxic Effects of Chemical Substances);

IATA: (International Air Transport Association); IMDG: (International Maritime Dangerous Goods);

TDG: (Recommendations on the TRANSPORT OF DANGEROUS GOODS Model

Regulations);

TOC: (Total Organic Carbon);

TSCA: (Toxic Substances Control Act of USA); DSL: (the Domestic Substances List of Canada); NDSL: (the Non-domestic Substances List of Canada)

End of report