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RECHARGEABLE LI-ION BATTERY

Safety Data Sheet

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

1.1. Product identifier

Code DCB180 (5ICR 19/65)

RECHARGEABLE LI-ION BATTERY 18V, 2600mAh, 46.8Wh Product name

Chemical name and synonym Article

1.2. Relevant identified uses of the substance or mixture and uses advised against

Intended use Power supply for portable tools

1.3. Details of the supplier of the safety data sheet

GOIZPER S.COOP Name **BARRIO ANTIGUA, 4** Full address

District and Country 20577 ANTZUOLA (GUIPUZKOA)

ESPAÑA

Tel. +34 943786000

e-mail address of the competent person responsible for the Safety Data Sheet

auriarte@goizper.com GOIZPER S.COOP Product distribution by:

1.4. Emergency telephone number

For urgent inquiries refer to +34 943786000

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

The "article" is not within article 4 (paragraph 8) of the CLP regulation, and therefore it must not be classified, labeled or packaged according to section 2.1 of Annex I of Regulation 1272/2008.

SECTION 3. Composition/information on ingredients

3.2. Mixtures

The lithium-ion battery contains:

Identification	Weight %	CAS Nº
Lithium nickelate	< 25	12031-65-1
Graphite	< 25	7782-42-5
Iron	< 14	7439-89-6
Lithium manganese oxide	< 10	12057-17-9
Cobalt lithium dioxide	< 5	12190-79-3
Cooper	< 15	7440-50-8
Dimethyl carbonate	< 5	616-38-6
Aluminium	< 5	7429-90-5
Polyethylene	< 3	9002-88-4
1,3-Dioxolan-2-one	< 3	96-49-1
Lithium hexafluorophosphate (1)	< 2	21324-40-3
Ethyl acetate	< 1	141-78-6
Carbon black	< 1	1333-86-4
Nickel	< 1	7440-02-0
Lithium carbonate	< 1	554-13-2



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SECTION 4. First aid measures

4.1. Description of first aid measures

No episodes of harm to the staff authorised to use the product have been reported. The following general measures should be adopted as necessary: INHALATION: Remove to open air. If the subject stops breathing, administer artificial respiration. Get medical advice/attention. INGESTION: Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician. EYES and SKIN: Wash with plenty of water. In the event of persistent irritation, get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed

Specific information on symptoms and effects caused by the product are unknown.

4.3. Indication of any immediate medical attention and special treatment needed

Information not available

SECTION 5. Firefighting measures

5.1. Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be of the conventional kind: carbon dioxide, foam, powder and water spray.

UNSUITABLE EXTINGUISHING EQUIPMENT

None in particular.

5.2. Special hazards arising from the substance or mixture

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE Do not breathe combustion products.

5.3. Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

If there are no contraindications, spray powder with water to prevent the formation of dust.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

6.3. Methods and material for containment and cleaning up

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up eith a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response ir 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.

6.4. Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.



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SECTION 7. Handling and storage

7.1. Precautions for safe handling

Before handling the product, consult all the other sections of this material safety data sheet. Avoid leakage of the product into the environment. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat.

Avoid mechanical or electrical abuse

The battery should not be opened, destroyed or incinerate, since they may leak or ruptura and realease 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.

7.2. Conditions for safe storage, including any incompatibilities

Storage preferably in cool, dry and well ventilated area, which is subject to little temperatura change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, not expose to direct sunlight. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s)

Information not available

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Information not available

8.2. Exposure controls

Comply with the safety measures usually applied when handling chemical substances.

HAND PROTECTION

None required.

SKIN PROTECTION

None required.

EYE PROTECTION

None required.

RESPIRATORY PROTECTION

None required, unless indicated otherwise in the chemical risk assessment.

PERSONAL PROTECTION IS RECOMMENDED FOR VENTING BATTERY

Respiratory protection, protective gloves, protective clothing and safety glass with side shields.

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.

ENVIRONMENTAL EXPOSURE CONTROLS

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance Square

Colour Not available

Odour If leaking, smells of medical ether.

Odour threshold Not available
pH Not available
Melting point / freezing point Not available
Initial boiling point Not applicable



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SECTION 9. Physical and chemical properties /...

Boiling range Not available Flash point Not applicable Evaporation rate Not available Flammability (solid, gas) Not available Lower inflammability limit Not available Upper inflammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure Not available Vapour density Not available Relative density Not available Solubility Not available Partition coefficient: n-octanol/water Not available Auto-ignition temperature Not available Decomposition temperature Not available Viscosity Not available Explosive properties Not available Oxidising properties Not available

9.2. Other information

Information not available

SECTION 10. Stability and reactivity

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use.

10.2. Chemical stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4. Conditions to avoid

Heat above 70°C or incinerate. Deform. Mutilate. Crush. Disassemble. Overcharge. Short circuit. Expose over a long period to humid conditions.

10.5. Incompatible materials

Oxidising agents, alkalis, water.

10.6. Hazardous decomposition products

Toxic fumes and may form peroxides.

SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

11.1. Information on toxicological effects

Metabolism, toxicokinetics, mechanism of action and other information

Information not available



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SECTION 11. Toxicological information /...

Information on likely routes of exposure

Information not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture: Not classified (no significant component)

ATE (Oral) of the mixture: >2000 mg/kg

ATE (Dermal) of the mixture: Not classified (no significant component)

SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class. In the even of exposure to internal contents, vapour fumes may be very irritating to skin.

SERIOUS EYE DAMAGE / IRRITATION

Does not meet the classification criteria for this hazard class. In the even of exposure to internal contents, vapour fumes may be very irritating to the eves.

RESPIRATORY OR SKIN SENSITISATION

Does not meet the classification criteria for this hazard class

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

SECTION 12. Ecological information

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or contaminate soil or vegetation.

12.1. Toxicity

Information not available

12.2. Persistence and degradability

Information not available

12.3. Bioaccumulative potential

Slowly bio-degradable

12.4. Mobility in soil

Information not available



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SECTION 12. Ecological information /...

12.5. Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage ≥ than 0,1%.

12.6. Other adverse effects

Information not available

SECTION 13. Disposal considerations

13.1. Waste treatment methods

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. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

SECTION 14. Transport information

14.1. UN number

Battery: UN 3480 Batteries packed with equipment: UN 3481

14.2. UN proper shipping name

Battery LITHIUM ION BATTERIES

Battery packed with equipment LITHIUM ION BATTERIES PACKED WITH EQUIPMENT

14.3. Transport hazard class(es)

CLASS 9

14.4. Packing group

N/A

14.5. Environmental hazards

ADR / RID: NO IMDG: NO IATA: NO

14.6. Special precautions for user

Battery tested in accordance with 38.3 Manual of Test and Criteria ST/SG/AC. 10/11/Rev. 6 Test Report No 1119040001 - 2019/05/13 - Shanghai Research Institute of Chemical Industry Testing Co. Ltd. Watt-hour rating: <math>48.6 Wh Net weight: 0.375 kg

Watt-hour rating less of 100 Wh per battery.

ADR/RID:Not restricted in accordance with special provision 188 IMDG: Not restricted in accordance with special provision 188 IATA: For batteries: Section II or IB of packing instruction 965

For batteries packed with equipment: Section II of packing instruction 966

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Information not relevant



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SECTION 15. Regulatory information

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

Seveso Category - Directive 2012/18/EC: None

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006

Product

Point 40

Contained substance

Point 27 NICKEL

Point 27 Lithium nickel dioxide

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage ≥ than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Information not available

German regulation on the classification of substances hazardous to water (AwSV, vom 18. April 2017)

WGK 1: Low hazard to waters

15.2. Chemical safety assessment

A chemical safety assessment has not been performed for the preparation/for the substances indicated in section 3.

SECTION 16. Other information

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value



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SECTION 16. Other information /...

- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

- 1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
- 2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
- 3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament 6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
- Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
- 8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament 9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
- 10. Regulation (EÚ) 2015/1221 (VII Atp. CLP) of the European Parliament
- 11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP) 16. Regulation (EU) 2019/521 (XII Atp. CLP)
 - The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals Ministry of Health and ISS (Istituto Superiore di Sanità) Italy

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control: therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

CALCULATION METHODS FOR CLASSIFICATION

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP. Part 4, unless determined otherwise in Section 12.