

SAFETY DATA SHEET

Product Name: Lithium ion Cell

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

PRODUCT NAME: Lithium ion Cell
INR18650P 1300mAh: 3.7V 1300mAh 4.81Wh
INR18650P 1500mAh: 3.7V 1500mAh 5.55Wh
INR18650H 2000mAh: 3.7V 2000mAh 7.40Wh
INR18650H 2200mAh: 3.7V 2200mAh 8.14Wh
APPLICATIONS: For Stock No. 43785 IMPACT WRENCH
SUPPLIER: Draper Tools Ltd

Hursley Road
Chandlers Ford
Eastleigh
Hampshire
SO53 1YF
Draper Helpline +44 (0) 2380 494344
Opening hours 8:30-17:00 Monday – Friday.
www.drapertools.com

SECTION 2: Hazards identification

Explosive Risk This article does not belong to the explosion dangerous goods.
Flammable Risk This article does not belong to the flammable material.
Oxidation Risk This article does not belong to the oxidation of dangerous goods.
Toxic Risk This article does not belong to the toxic dangerous goods.
Radioactive Risk This article does not belong to the radiation of dangerous goods.
Mordant Risk This article does not belong to the corrosion of dangerous goods.
Other Risk This article is Li-ion Battery. Watt hour rate respectively 4.81Wh, 5.55Wh, 7.4Wh, 8.14Wh.

SECTION 3: Composition/information on ingredients

Chemical Name	Concentration or concentration ranges (%)	CAS Number
Polypropylene;	0.3	9003-07-0
Nickel (Ni)	15.5	7440-02-0
Iron		7439-89-6
Aluminium (Al)	3.88	7429-90-5
Nickel (Ni)		7440-02-0
Iron		7439-89-6
Polypropylene;	14.3	9003-07-0
Lithium hexafluorophosphate		21324-40-3
Ethyl methyl carbonate		623-53-0
Dimethyl carbonate		616-38-6
LiMn _{1-x-y} Ni _x Co _y O ₂	28.27	182442-95-1
Graphite	17.8	7782-42-5
Carbon Black	1.2	1333-86-4
Polyvinylidene Fluoride (PVDF)	1.75	24937-79-9
Copper (Cu)	9.71	7440--50-8
Aluminium (Al)	6.22	7429-90-5
Nickel (Ni)	0.97	7440-02-0
Diaphragm	0.1	--

SECTION 4: First aid measures

Eye

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin

Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

Inhalation

Remove from exposure and move to fresh air immediately. Use oxygen if available.

Ingestion

Give at least 2 glasses of milk or water. Induce vomiting unless patient is unconscious. Call a physician.

SECTION 5: Firefighting measures

Flash Point: N/A.

Auto-Ignition Temperature: N/A.

Extinguishing Media: Water, CO2.

Special Fire-Fighting Procedures

Self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

Cell may vent when subjected to excessive heat-exposing battery contents.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide, lithium oxide fumes.

SECTION 6: Accidental release measure**Steps to be Taken in case Material is Released or Spilled**

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

SECTION 7: Handling and storage

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

Precautions to be taken in handling and storing

Avoid mechanical or electrical abuse. Storage preferably in cool, dry and ventilated area, which is subject to little temperature change. Storage at high temperatures should be avoided. Do not place the battery near heating equipment, nor expose to direct sunlight for long periods.

Other Precautions

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

SECTION 8: Exposure controls/personal protection**Respiratory Protection**

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.

Ventilation

Not necessary under conditions of normal use.

Other Protective Clothing or Equipment

Not necessary under conditions of normal use.

Personal Protection is recommended for venting battery

Respiratory Protection, Protective Gloves, Protective Clothing and safety glass with side shields.

SECTION 9: Physical and chemical properties

Appearance: Cylindrical shape

Ref. No.: N/A

Odour: If leaking, smells of medical ether.

pH: Not applicable as supplied.

Flash Point: Not applicable unless individual components exposed.

Flammability: Not applicable unless individual components exposed.

Relative density: Not applicable unless individual components exposed.

Solubility (water): Not applicable unless individual components exposed.

Solubility (other): Not applicable unless individual components exposed.

SECTION 10: Stability and reactivity

Stability: Product is stable under conditions described in Section 7.

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

Materials to avoid: Oxidising agents, alkalis, water.

Hazardous Decomposition Products: Toxic Fumes, and may form peroxides.

Hazardous Polymerization: N/A.

If leaked, forbidden to contact with strong oxidizers, mineral acids, strong alkalies, halogenated hydrocarbons.

SECTION 11: Toxicological information

Signs & symptoms: None, unless battery ruptures.

In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

Inhalation: Lung irritant.

Skin contact: Skin irritant

Eye contact: Eye irritant

Ingestion: Poisoning if swallowed

Medical conditions generally aggravated by exposure: In the event of exposure to internal contents, moderate to severe irritation, burning and dryness of the skin may occur, Target organs nerves, liver and kidneys.

SECTION 12: Ecological information

Mammalian effects: None known at present.

Eco-toxicity: None known at present.

Bioaccumulation potential: Slowly Bio-degradable.

Environmental fate: None known environmental hazards at present.

SECTION 13: Disposal considerations

Do not incinerate, or subject cells to temperature in excess of 70°C, Such abuse can result in loss of seal leakage, and/or cell explosion. Dispose of in accordance with appropriate local regulations.

SECTION 14: Transport information

Label for conveyance: Lithium Battery Label.

UN Number: ~~UN3840~~ or UN3481

Packing Group: N/A

EmS No: F-A, S-I

Marine pollutant: No

Proper Shipping name: 1) Lithium ion batteries; 2) Lithium ion batteries packed with equipment; 3) Lithium ion batteries contained in equipment. (including Lithium ion polymer batteries)

Hazard Classification: The goods shall be complied with the requirements of Section II (or Section IB) of Packing Instructions 965–967 of 58th DGR Manual of IATA (2017 edition), including the passing of the UN38.3 test. And also complies with the Special Provision 188 of IMDG CODE (Amdt.37-14) 2014 Edition.

SECTION 15: Regulatory information

Law information

《Dangerous Goods Regulations》

《Recommendations on the Transport of Dangerous Goods Model Regulations》

《International Maritime Dangerous Goods》

《Technical Instructions for the Safe Transport of Dangerous Goods》

《Classification and code of dangerous goods》

《Occupational Safety and Health Act》 (OSHA)

《Toxic Substance Control Act》 (TSCA)

《Consumer Product Safety Act》 (CPSA)

《Federal Environmental Pollution Control Act》 (FEPCA)

《The Oil Pollution Act》 (OPA)

《Superfund Amendments and Reauthorization Act TitleIII (302/311/312/313)》 (SARA)

《Resource Conservation and Recovery Act》 (RCRA)

《Safety Drinking Water Act》 (CWA)

《California Proposition 65》

《Code of Federal Regulations》 (CFR)

In accordance with all Federal, State and local laws.

SECTION 16: Other information

This information comes from reliable sources, but no warranty is made to be completeness and accuracy of information contained. We don't assume responsibility for an damage or loss because of misuse of batteries. Users should grasp the correct use method and be responsible for the use of bteries.

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