

SAFETY DATA SHEET

Issue Date: 30/09/2025 Version: 2

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

1.1. Product identifier

Product Name:

Lithium Metal Battery

3V Lithium-Manganese Dioxide Button Cell

CR2032

Weight: 3.0g

Lithium content: 0.072g

Applications:

For: **Welding Helmet (02517)**

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

Relevant identified uses

Not for recharge

1.3. Details of the supplier of the safety data sheet

Draper Tools Ltd

Hursley Road, Chandlers Ford, Eastleigh

Hampshire SO53 1YF

United Kingdom

www.drapertools.com

1.4. Emergency telephone number

Draper Helpline +44 (0) 2380 494344

Opening hours 8:30-17:00 Monday – Friday.

SECTION 2: Hazards identification

Hazard description:

This is a battery cell and use under normal conditions. The Lithium battery is hermetically sealed. Not dangerous with normal use. Do not dismantle, open or shred the battery; ingredients contained within or their ingredients products could be harmful.

Primary route of Exposure:

Inhalation, ingestion, Skin contact and Eye contact.

Potential Health Effects

Inhalation: Vapours or mists from a ruptured battery may cause respiratory irritation.

Ingestion: The battery ingredients contained within or their ingredients products can cause serious chemical burns of mouth, esophagus, and gastrointestinal tract.

Skin: Skin contact with contents of an open battery can cause severe irritation or burns to the skin.

Eye: Eye contact with contents of an open battery can cause severe irritation or burns to the eye.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Information about the chemical nature of product:

Substance Name	Chemical Identification	EC#	Approx % Weight
	CAS#	EINECS	
Lithium Steel	7439-93-2	231-102-5	2.0%
Propylene Carbonate	108-32-7	203-572-1	3.2%
Manganese Dioxide	1313-13-9	215-202-6	33.0%
1,2Dimethoxymethane	110-71-4	203-794-9	1.0%
Lithium perchlorate	7791-03-9	232-237-2	1.0%
Graphite	7782-4-5	231-955-3	6.2%
Steel	65997-19-5	266-048-1	48.5%
Polypropylene	9003-07-0	618-352-4	2.8%
Carbon Black	1333-86-4	215-609-9	2.3%

SECTION 4: First aid measures

Description of first aid measures

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.

SECTION 5: Firefighting measures

Suitable extinguishing media:

Small Fire: Dry chemical, soda ash, lime or sand.

Large Fire: DRY sand, dry chemical, soda ash or lime or withdraw from area and let fire burn. Move containers from fire area if you can do it without risk.

Unsuitable extinguishing media: Water or foam

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.

Specific protective actions for fire-fighters:

Wear positive pressure self-contained breathing apparatus.

SECTION 6: Accidental release measure

Personal precautions, protective equipment, and emergency procedures

Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment.

Methods and materials for Containment

Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.

SECTION 7: Handling and storage

Handling:

Do not handling the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery.

Storage:

Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. Keep out of reach of children. Do not expose the battery to heat or fire. Avoid storage in direct sunlight. Do not store together with oxidizing and acidic material.

SECTION 8: Exposure controls/personal protection

A complete and good battery is not dangerous. The following is the information after the battery is broken and disassembled.

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.

Hand protection:

Wear appropriate protective gloves to reduce skin contact.

Eye 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.

SECTION 9: Physical and chemical properties

Physical State:

Form: Button
Colour: Silver
Odour: Odourless

Change in condition:

pH: Not applicable
Flash Point: Not applicable
Flammability: Not applicable
Relative density: Not applicable
Solubility (Water): Not applicable
Solubility (Other): Not applicable

SECTION 10: Stability and reactivity

Stability: stable

Conditions to Avoid: Flames, sparks, and other sources of ignition, Incinerate, Deform, Mutilate, Crush, short circuit.

incompatible materials: Oxidizing agents, acid base.

Hazardous decomposition products: carbon monoxide, carbon dioxide.

Lithium- manganese dioxide button Cell do not meet any of the criteria established in 40CFR 261.2 for reactivity.

SECTION 11: Toxicological information

Toxicity information is available on the battery ingredients in Section 2, but, generally not applicable to intact batteries as used by customers.

SECTION 12: Ecological information

If the battery is disposed of on land or in water, the battery case may corrode and liquid leak from the battery. Ecological information has not been reported.

SECTION 13: Disposal considerations

Dispose of the batteries according to government regulations.

SECTION 14: Transport information

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

Separate batteries to prevent short-circuiting and they should be packed in strong package during transport. Keep away from high temperature and open flames.

Regulatory Parties	Special Provisions
ADR	SP188
IMDG	SP188
UN	UN3091
US DOT	29, A54, A101, A100
IATA, ICAO	968/969/970

The Lithium Manganese Dioxide Button Cell – CR2032 has passed the test UN38.3. In addition, Lithium content is less than 0.3g.

Air Transportation:

2025 IATA Dangerous Goods Regulations 66th Edition.

Shipping Name: Lithium Metal Batteries

UN Number:

UN3091 Batteries or cells contained in equipment / Batteries or cells packed with equipment.

Class 9 (Miscellaneous)

This Lithium-Manganese Dioxide Battery Cell can meet the requirement of IATA Dangerous Goods Regulations 66th Edition of 2025 Packing Instruction PI 968 - 970.

Ocean Transportation:

IMO, all batteries are regulated as Hazardous Material by the International Maritime Organization (IMO) when transporting more than 24 batteries or 12 batteries in a single package. These must be transported according to the requirement in Special Provisions"188". Batteries are as per IMDG SP:188 and tested as NON DG. Package complies with the special provision 188 of IMDG CODE(Amdt.41-22)2022 Edition.

This Lithium-Manganese Dioxide battery cell can be transported as Non-Dangerous Goods by vessel as these articles satisfy with SP188 of IMO-IMDG Code.

SECTION 15: Regulatory information

Special requirement be according to he local regulations.

SECTION 16: Other information

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This Safety Data Sheet contains health, safety and environment information, and was written by reflecting current technology. This data is not a guarantee for the product's character or quality and should be used only as a reference in relation to safe use of the product.

*** End of SDS ***