

TESTIFIRE XTR2 LITHIUM ION BATTERY

SAFETY DATA SHEET

SDS0101US-EN
ACCORDING TO US CFR 1910.1200

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name TESTIFIRE XTR2 Li-ion Battery
Trade Name TESTIFIRE-BP-001, TESTIFIRE-BP-061 (Battery Product), TESTIFIRE-XTR2-001, TESTIFIRE-XTR2-061 (included as the battery for device)

CAS No. Article.

EINECS No. Article.

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

Identified Use(s) Battery product.

Uses Advised Against None known.(See Section:7)

1.3 Details of the supplier of the safety data sheet

Company Identification SDi, LLC, 3535 State Highway 66, Parkway 100 Building 6, Neptune, NJ 07753, USA

Telephone (732) 751 9266

Fax (732) 751 9241

E-mail sales@sdfire.com

1.4 Emergency telephone number

Info Trac 1-800-535-5053

1.5 Details of the Manufacturer

Company Identification Detectortesters (No Climb Products Ltd), Edison House, 163 Dixons Hill Road, Welham Green, Hertfordshire AL9 7JE, United Kingdom.

Telephone +44 (0) 1707 282760

Fax +44 (0) 1707 282777

E-mail SDS@detectortesters.com

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

US CFR 1910.1200 Not classified as dangerous for supply/use. The battery is a sealed unit and therefore the ingredients present have no hazard potential except in a situation where the battery has been violated or dismantled.

2.2 Label elements

Hazard Pictogram(s) None.

Signal Word(s) None.

Hazard Statement(s) None.

Precautionary Statement(s) None.

2.3 Other hazards

None.

2.4 Additional Information

There is no hazard when the measures for handling and storage are followed. In case of cell damage, possible release of dangerous substances and a spontaneous flammable gas mixture may be released. Battery content must not get in contact with water. Contact with water liberates extremely flammable gases.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The regulations for substances are not applicable, as cells or batteries are articles under the relevant definitions. The chemicals are contained in a sealed metal can, the risk of exposure only if the cell/battery is mechanically or electrically abused. The following chemicals are listed for information purposes only.

3.2 Mixtures

Hazardous Ingredient(s)	Molecular Formula	%W/W	CAS No.
Lithium transition metal oxide	Li _x MO ₂	37.2%	182442-95-1
Carbon (graphite)	C	21.0%	7782-42-5
Aluminium	Al	3.27%	7429-90-5
Copper	Cu	7.69%	7440-50-8



Specialized Fire Products

TESTIFIRE XTR2 LITHIUM ION BATTERY

Steel (can)	Fe	13.53%	7439-89-6
Electrolyte	C ₃ H ₄ O ₃	10.67%	96-49-1
	C ₄ H ₈ O ₃		623-53-0
	C ₃ H ₆ O ₃		616-38-6
	F ₆ LiP		21324-40-3
Others		6.54%	Proprietary

The UN GHS labelling information is not provided in this section as batteries are articles and therefore are exempted from the UN GHS labelling requirements.

3.3 Additional Information

Not applicable.

SECTION 4: FIRST AID MEASURES



4.1 Description of first aid measures

Inhalation	Unlikely route of exposure. Electrolyte leakage: Remove to fresh air immediately. Seek medical treatment.
Skin Contact	Unlikely route of exposure. Electrolyte leakage: After contact with skin, take off immediately all contaminated clothing, and wash immediately with plenty of water.
Eye Contact	Unlikely route of exposure. Electrolyte leakage: Flush eyes with water for at least 15 minutes. Seek medical treatment.
Ingestion	Unlikely route of exposure. Electrolyte leakage: Make victim drink plenty of water. Do not induce vomiting. Seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

None anticipated.
Electrolyte leakage Can cause damage to the eyes and skin.

4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media	Extinguish preferably with dry chemical, sand or carbon dioxide.
Unsuitable extinguishing media	Water, Water spray.

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition product(s) include: Hydrofluoric acid (upon contact with water), Hydrogen fluoride (HF) gas, Carbon monoxide and Carbon dioxide.

5.3 Advice for fire-fighters

In case of major fire and large quantities: Wear NIOSH approved SCBA & full protective equipment. If possible, remove cell(s) from fire fighting area. If heated above 125°C, cell(s) can explode/vent. Cell is not flammable but internal organic material will burn if the cell is incinerated.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Chemical contents are sealed in a can. But if the battery is mechanically or electrically abused, contents may leak out. In such a case, take action as detailed below.

6.1 Personal precautions, protective equipment and emergency procedures

Use PPE. Avoid contact with skin, eyes or clothing. Avoid breathing fumes.

6.2 Environmental precautions

Prevent entry into drains.

6.3 Methods and material for containment and cleaning up

Absorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal.

6.4 Reference to other sections

See Also Section: 8, 13






TESTIFIRE XTR2 LITHIUM ION BATTERY

SECTION 7: HANDLING AND STORAGE

When used correctly, Lithium-Ion Batteries are a safe and dependable source of power.

- 7.1 Precautions for safe handling**
 - Avoid mechanical damage to the cell. Do not open or disassemble.
 - Do not throw batteries in water.
 - Keep away from: Children
 - Avoid overheating.
 - Keep away from heat, sources of ignition and direct sunlight.
 - Do not modify batteries.
- 7.2 Conditions for safe storage, including any incompatibilities**
 - Storage temperature: Ambient.
 - Storage life: Stable under normal conditions.
 - Incompatible materials: Water
- 7.3 Specific end use(s)**: Battery product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- 8.1 Control parameters**: Under normal conditions of battery use, internal components will not present a health or environmental hazard.
- 8.2 Exposure controls**
 - 8.2.1 Appropriate engineering controls**: Not required under normal use.
 - 8.2.2 Personal protection equipment**
 - Eye/ face protection: Not required under normal use.
Electrolyte leakage: Wear eye/face protection.
 -  Skin protection (Hand protection/ Other): Not required under normal use.
Electrolyte leakage: Wear impervious gloves.
 -  Respiratory protection: No personal respiratory protective equipment normally required.
Electrolyte leakage: Wear suitable respiratory protective equipment.
 -  Thermal hazards: Not applicable.
- 8.2.3 Environmental Exposure Controls**: Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

- 9.1 Information on basic physical and chemical properties**
 - Appearance: Solid.
 - Colour: Not applicable.
 - Odour: Odourless.
 - Odour threshold: Not applicable.
 - pH: Not determined.
 - Melting point/freezing point: Not applicable.
 - Initial boiling point and boiling range: Not applicable.
 - Flash Point: Not applicable.
 - Evaporation rate: Not applicable.
 - Flammability (solid, gas): Non-flammable.
 - Upper/lower flammability or explosive limits: Not applicable.
 - Vapour pressure: Not applicable.
 - Vapour density: Not applicable.
 - Relative density: Not applicable.
 - Solubility(ies): Insoluble
 - Partition coefficient: n-octanol/water: Not applicable.
 - Auto-ignition temperature: Not applicable.
 - Decomposition Temperature: Not applicable.



Specialized Fire Products

Kinematic Viscosity
Explosive properties
Oxidising properties

TESTIFIRE XTR2 LITHIUM ION BATTERY

Not applicable.
Not explosive when used as intended.
Not oxidising when used as intended.

SECTION 10: STABILITY AND REACTIVITY

Batteries utilize a chemical reaction and will over time show a deterioration in performance if stored for a long time without being used. Lithium ion batteries are contained in a sealed can and are sealed to avoid chemical release under normal conditions of use.

10.1 Reactivity	Stable under normal conditions. Avoid conditions in section 7
10.2 Chemical stability	Stable under normal conditions.
10.3 Possibility of hazardous reactions	No hazardous reactions known if used for its intended purpose.
10.4 Conditions to avoid	See section 7.
10.5 Incompatible materials	Stable under normal conditions.
10.6 Hazardous decomposition product(s)	No hazardous decomposition products known when used as intended.

SECTION 11: TOXICOLOGICAL INFORMATION

Unlikely to cause harmful effects under normal conditions of handling and use. The chemicals in Section 3 are contained in a sealed can.

11.1 Information on toxicological effects	
Acute toxicity	Low acute toxicity.
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Not classified.
Respiratory or skin sensitization	It is not a skin sensitiser.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	None anticipated.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	None anticipated.
11.2 Other information	None.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	Under normal conditions of battery use, internal components will not present a health or environmental hazard.
12.2 Persistence and degradability	Not applicable.
12.3 Bioaccumulative potential	Not applicable.
12.4 Mobility in soil	Not applicable
12.5 Other adverse effects	Do not flush spilt material into any public water system.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods	Consult an accredited waste disposal contractor or the local authority for advice. Lithium batteries are neither specifically listed nor exempted from Federal Environmental Protection Agency (US EPA) hazardous waste regulations.
13.2 Additional Information	Open cells should be treated as hazardous waste. DO NOT INCINERATE or subject the battery cell to temperatures exceeding 100°C/212°F.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number	UN 3480 (when supplied as TESTIFIRE-BP-001 or TESTIFIRE-BP-061) UN 3481 (when supplied as part of TESTIFIRE-XTR2-001 or TESTIFIRE-XTR2-061)
14.2 UN proper shipping name	Lithium ion batteries (UN3480) Lithium Ion Batteries packed with equipment (UN3481)
14.3 Transport hazard class(es)	
ADR	Both UN3480 & UN3481 are NOT considered hazardous due to compliance to SP188.
IMDG	Both UN3480 & UN3481 are NOT considered hazardous due to compliance to SP188.
IATA	UN 3480 (when supplied as TESTIFIRE-BP-001 or TESTIFIRE-BP-061) Lithium-ion batteries in compliance with Section IB of PI965.



TESTIFIRE XTR2 LITHIUM ION BATTERY

- DOT UN3481 (when supplied as TESTIFIRE-XTR2-001 or TESTIFIRE-XTR2-061) Lithium-ion batteries in compliance with Section II of PI966.
DOT 49 CFR, Subchapter C, Part 171, Part 173.24, 173.24a and 173.185
- 14.4 Packing group Not applicable.
- 14.5 Environmental hazards Not applicable.
- 14.6 Special precautions for user Not applicable.
- 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: REGULATORY INFORMATION

The regulations for substances are not applicable, as cells or batteries are articles under the relevant definitions.

- 15.1.1 UN (United Nations) Recommendations on the Transport of Dangerous Goods Model Regulations, 7th revised edition, New York and Geneva 2019, Ammendment 1, 2021.
- 15.1.2 ICAO (International Civil Aviation Organization) Techncial Instructions for the safety transport of dangerous goods by air 2023-2024.
- 15.1.3 IATA (International Air Transport Organization) Dangerous Goods Regulations 64th Edition; Effective January 1st 2023.
- 15.1.4 ADR/RID 2023
- 15.1.5 IMO (International Maritime Organization): International Maritime Dangerous Goods (IMDG) Code 2023 Edition (Amendment 41/22).

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: Header.

USA

NFPA		HMIS	
Health	0	Health	0
Fire	1	Flammability	1
Instability	0	Physical hazards	0

LEGEND

- LTEL Long Term Exposure Limit
- STEL Short Term Exposure Limit
- OSPAR Oslo and Paris Convention
- OSHA Occupational Safety and Health Administration
- NFPA National Fire Protection Association
- HMIS Hazardous Material Information System
- DNEL Derived No Effect Level
- PNEC Predicted No Effect Concentration
- VOC Volatile Organic Compounds

Disclaimers

The information is based on the best knowledge of SDi and its advisors and is given in good faith, but we cannot guarantee its accuracy, reliability or completeness and therefore disclaim any liability for loss or damage arising out of use of this data. Since conditions of use are outside the control of the Company and its advisors we disclaim any liability for loss or damage when the product is used for purposes other than it is intended.

Annex to the extended Safety Data Sheet (eSDS)

No information available.