Material Safety Data Sheet (MSDS)

TREND Networks FiberMASTER S60 Active Core Alignment Fusion Splicer & FiberMASTER S40 Adaptive Clad Alignment Fusion Splicer

1. COMPANY IDENTIFICATION

Lithium-Ion Battery
TREND Networks Part Number: R301-S60K, R301-S60, R301-S40K & R301-S40
Manufacturer Ref: X11G

Cells used in this battery are manufactured by:

Shenzhen ONE Energy Technology Co.Ltd
Room 803. Bai Wang R&D Building #1, No.5298
ShaHe West Road
XiLi, NanShan, Shenzhen. PRC
Post Code 518055

Emergency Telephone Number 86-755-86718350

Further Information

Battery-System: Lithium-Ion(Li-ion) battery

Nominal Voltage :10.SV
Rated Capacity:5200mAb Wh
rating:56.16Wh

Contact Information:
TREND Networks House, 728 London Road, High Wycombe, Buckinghamshire, HP11 1HE, United Kingdom.

2. INGREDIENTS

Battery Cell

Components	Content(wt%)	CAS#
Lithium Cobalt Dioxide (LiCoO2)	less than 38wt%	12190-79
Lithium Hexafluorophosphate (LiPF6)	less than 3wt%	21324-40-:-38
Ethylene Carbonate (C3H4O3)	less than 6wt%	96-49-1
Chain Carbonate (-)	less than 8wt%	
Graphite (C)	less than 20wt%	7782-42-5
Lead (Pb)	less than 0.1wt%(1000ppm)	
Mercury (Hg)	less than	

	0.0005wt%(5ppm)	

Note:others 25% are included below
material AL(Positive Base
Film,Cap,Can,Tab) Cu(Negative Base
Film) Ni(Tab,Terminal)
Fe(Terminal)

HAZARDOUS INGREDIENTS	%	CASNUMBER
Lead	<0.1	7439-92-1
Mercury	0	7439-97-6
Chromium	0	7440-47-3
Cadmium	0	7440-43-9
Plastic case and Si2O	0	*N/A*

Resin(PP,PE,PET)(Separator, Plastic Parts, Insulator)
Circuit Module

Plastic Parts and Paints

HAZARDOUS INGREDIENTS	%	CASNUMBER
Polyclorinate	More than 81 wt%	25971-63-5
Flame Retardant	Less than 12 wt%	
Elastomer	Less than 7 wt%	

3. HAZARDS IDENTIFICATION PROTENTIAL HEALTH EFFECTS

PRIMARY ROU ONE OF ENTRY

Skin contact, Skin absorption, Eye contact, Inhalation, and Ingestion : NO

SYMPTOMS OF EXPOSURE

Skin contact
No effect under routine handling and use.

Skin absorption
No effect under routine handling and use.

Eye contact
No effect under routine handling and use.

Inhalation
No effect under routine handling and use.

4. FIRST AID MEASURES

INHALATION, EYE CONTACT, and SKIN CONTACT : Not a health hazard.

INGESTION
If swallowed, obtain medical attention immediately.

If exposure to internal materials within cell(pack) due to damaged outer casing, the Following actions are recommended.

INHALATION
Leave area immediately and seek medical attention.

EYE CONTACT
Rinse eyes with water for 15 minutes and seek medical attention.

SKIN CONTACT
Wash area thoroughly with soap and water and seek medical attention.

INGESTION
Drink milk/water and induce vomiting; seek medical attention.

5. FIRE FIGHTING MEASURES

GENERAL HAZARD
Cell is not flammable but internal organic material will burn if the cell is incinerated.
Combustion products include, but are not limited to hydrogen·fluoride, carbon monoxide and carbon dioxide.

EXTINGUSHING MEDIA
Use extinguishing media suitable for the materials that are burning.

SPECIAL FIREFIGHTING INSTRUCTIONS
If possible, remove cell(s) from fire fighting area. If heated above 125°C, cell(s) can explode/vent.

FIREFIGHTING EQUIPMENT
Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear.

6. ACCIDENTAL RELEASE MEASURES

ON LAND
Place material into suitable containers and call local fire/police department.

INWATER
If possible, remove from water and call local fire/police department.

7. HANDLING AND STORAGE

HANDLING

No special protective clothing required for handling individual cells.

STORAGE
Store in a cool, dry place.

8. EXPOSURE CONTROLS//PERSONAL PROTENTION

ENGINEERING CONTROLS

Keep away from heat and open flame. Store in a cool dry place.

PERSONAL PROTECTION

Respirator: Not required during normal operations. SCBA required in the event of a fire.

Eye/face protection: Not required beyond safety practices of employer. Gloves: Not required for handling of cells.

Foot protection: Steel toed shoes recommended for large container handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

State	Solid
Odor	*N/A*
PH	*N/A*
Vapor pressure Vapor	*N/A*
density Boiling point	*N/A*
Solubility in water	*N/A*
Specific gravity	*Insoluble*
Density	*N/A*

10. STABILITY AND REACTIVITY

REACTIVITY
None

Solid
NIA

INCOMPATIBILITIES
None during normal operation. Avoid exposure to heat, open flame, and corrosives.

HAZARDOUS DECOMPOSITION PRODUCTS
None during normal operating conditions. If cells are opened, hydrogen fluoride and carbon monoxide may be released.

CONDITIONS TO AVOID

Avoid exposure to heat and open flame. Do not puncture, crush or incinerate.

11. TOXICOLOGICAL INFORMATION

This product does not licit toxicological properties during routine handling and use. Sensitization: NO Teratogenicity: NO Reproductive toxicity: NO Acute toxicity: NO This product does not contain any kinds of the following substances and halogen-type flame retardants including Chlorine and Bromide type harmful flame retardants which are listed

Appendix of TCO documents and relevant international ECO requirements:

Polybromated Biphenyls (PBB)
Polybromated Diphenylethers (PBDE)
Polychlorinated Biphenyls (PCBs)
Polychlorinated Terphenyls(PCTs)
Polychlorinated Paphthalene(PCN)
Chlorinated Paraffins(CI 0-C13)
Chlorofluorocarbons(CFCs)
Polyvinyl Chloride(PVC)
Carbon Tetrachloride

None of the following substances will be exposed, leaked, or emitted during transportation, storage or any operation and any temperature condition:

12. Ecological information

The batteries do not contain mercury, cadmium or other heavy metals.

13. Disposal Considerations

Dispose by incineration or burial at permitted waste treatment and/or disposal sites.

Batteries do not contain hazardous materials according to EC directives 91/157/EEC and 93/86/EEC.
For large quantities a disposal service is offered upon request.

14. Transport information

With regard to air transport, the following regulations are cited and considered:
-The International Civil Aviation Organization(ICAO) Technical Instructions 2023~2024 Edition)
-The International Air Transport Association (IATA) Dangerous Goods Regulations (65th edition Packing Instruction 965,966 or 967 Section II is applied.)
-The International Maritime Dangerous Goods(IMDG) Code Amendment 41-22,Special Provisions 188,230,310&957 for UN3480/348l Lithium Ion Battery , Packing Instruction P903 for lithium ion batteries.
-US Department of Transportation (DOT) 49 code of Federal Regulations [USA] International Civil Aviation Administration (ICAO),There is no hazards in accordance with the UN recommendations tests (Manual of Tests and Criteria ,Part III, sub-section

- 38.3-, 1.2m Drop)

N	ITEMS	RESULT	REMARK
I	Altitude	Pass	
2	Thermal shock	Pass	
3	Vibration	Pass	
4	Shock	Pass	
5	External Short	Pass	
6	Impact	Pass	
7	Overcharge	Pass	
8	Forced Discharge	*NIA*	For cell
9	1.2m Drop Test	Pass	

15. Regulatory Information:

Local hazardous waste disposal laws.
This product is made from materials with no detectable mercury.

16. Other Information:

The information contained in this Safety data sheet is based on the present state of knowledge and current legislation. This safety data sheet provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.