

Material Safety Data Sheet

Safety information

MEROTEC GmbH, Otto-Brenner-Str. 8, 47877 Willich, Germany Revision: 07.01.2020 Rev.-No.: 1.01 Battery pack

1. Chemical Product And Company Identification

Product Name: Lithium-Ion Battery 846615 (INR18650-15Q), 846618 (INR18650-20Q), 846620 (INR18650-29E), 846746 (INR18650-29E), 862601 (INR18650-29E), 862617 (INR18650-20Q), 862618 (INR18650-29E) Other/Generic Names: Battery pack Manufacturer/Distributor: MEROTEC GmbH Otto-Brenner-Str. 8 47877 Willich / Germany

For More Information Call: (Monday-Friday, 8:00 AM– 5:00 PM CST) MEROTEC GmbH Customer Service +49 2154 825325 1006 (German & English) In Case of Emergency Call: (24 Hours/Day, 7 Days/Week) +49 172 7489845 (German & English)

2. Composition/Information on ingredients

Characterization

Battery pack with Lithium metal oxide

Important information

The battery should not be opened, heated above 120°C or burned since the exposition with the ingredients could be harmful under certain conditions. The product contains neither metallic lithium nor lithium alloy.

Composition

| Cathode: | Lithium-Metal Oxide (active material) |
|--------------|---------------------------------------|
| | Polyvinylidene Fluoride (binder) |
| | Graphite (conductive material) |
| Anode: | Carbon (active material) |
| | Polyvinylidene Fluoride (binder) |
| Electrolyte: | Organic Solvent (non aqueous liquid) |
| | Lithium Salt |

3. Possible Risks

Not classified as dangerous according the EC-Guideline 1999/45/EG.



4. First aid measures

The batteries are hermetically closed. A risk of exposure can only occur when the cells are mechanically abused. The following first aid measures therefore only refer to the handling in the case of release of the ingredients and not on the use of the battery under normal conditions.

General information

In case of contact, take off immediately all contaminated clothing.

In case of inhalation

In case of damages possible risk of respiratory irritation. Supply fresh air. If disorders persist, contact a doctor.

In case of skin contact

In case of damages possible risk of skin irritation. In case of skin contact wash off with water and soap. If disorders persist, contact a doctor.

In case of eye contact

In case of damages possible risk of eye irritation. In case of eye contact rinse thoroughly with water. If disorders persist, contact a doctor.

5. Fire-fighting measures

Suitable extinguishing material

Water CO2 Dry chemical extinguishers

Extinguishing material that may not be used for safety reasons

Full water jet

Special exposure hazards arising from the substance, combustible products or resulting gases

Firefighting measures, rescue works and clearance works with impact of the smouldering fire fumes or fire gases should only be carried out with suitable respiratory protective equipment.

Additional information

Residues of fires and chemically contaminated water should be disposed in compliance with the local regulations.

6. Accidental release measures

Personal precautions



Use personal protective clothing. Avoid skin contact.

Environmental precautions

Dispose damaged batteries according pos. 13 of this safety information.

Methods for cleaning up/taking up

Soak up with suitable absorbent material and dispose in compliance with the regulations.

7. Handling and storage

Store in well ventilated cool areas. Avoid Overheating, e.g. through incident solar radiation. Protect from air humidity and water. Do not short-circuit. Storage temperature: < 60°C.

8. Exposure controls / personal protection

If handled in a suitable way, no personal protective equipment is necessary.

9. Physical and chemical properties

Compact battery pack with plastic shell. The product neither contains metallic lithium nor lithium alloys.

10. Stability and Reactivity

Not applicable.

11. Toxicology

No risk if handled reasonable. In case of damages or improper use irritant or sensitizing ingredients may get released.

12. Ecology

No negative ecologic effects are expected, if the product is used and disposed regularly.

13. Disposal

Batteries have to be collected separately from other wastes. Avoid short-Circuits during collecting or storing. If damages occur, batteries have to be packed solitary in a plastic bag. Admit to an approved disposal system. In the U.S. and Canada, recycle Li-Ion batteries at a Bosch Tool Service Center, RBRC collection (see www.RBRC.com), or an approved battery recycler. Use only approved Containers for collection. EWC Nr. 16 06 05 Other batteries and accumulators.



14. Transport information

Transport temperature: < 60°C.

Important Notice!

The commercial transport of Lithium battery packs is subject to the laws and regulations on dangerous goods. Any preparation for transport and actual transport is only allowed by suitably qualified personnel, or the process must be supervised by respective experts or qualified companies.

Exception: simplified special regulations of the laws and regulations on dangerous goods may be applied to battery packs with a max. stored energy of up to 100 Wh. (The max. stored energy is shown on the batteries' rating label.)

Transport regulations:

Lithium batteries are subject to the following regulations on dangerous goods – and any applicable exceptions – in the respectively latest, effective version: Dangerous goods class 9

- UN 3480: Lithium Ion Batteries
- UN 3481: Lithium Ion Batteries contained in equipment (inserted or permanently connected), or
 Lithium Ion Batteries packed with equipment (e. g. shipped in the tool's case)

Packing Group: II Tunnel Category E Special provisions and packing provisions: ADR, RID: 188, 230, 310, 636, P903, P903a, P903b

IATA: A88, A99, A154, A164, P965, P966, P967, P968, P969, P970 See also <u>www.iata.org</u> for reference.

IMDG Code: 188, 230, 310, P903 EmS: F-A, S-I stowage category A

Defective or damaged batteries are subject to tightened regulations, which might include complete prohibition to transport. This prohibition to transport is applicable to air transport (ICAO T.I., IATA DGR-special provision A154).

For the transport of used but undamaged batteries, please also refer to the respective special provisions (636) and/or the respective packing regulations (P903a and P903b / ADR).

Waste batteries and batteries intended for recycling or disposal are forbidden from air transport (IATA special provision A 183).

Exceptions require approval from the departure country's responsible national government agency.



15. Other regulations

Labelling

The product has not to be labeled / classified according the EC-Guidelines.

16. Other information

Disclaimer:

Although MEROTEC GmbH has attempted to provide current and accurate information herein, MEROTEC GmbH makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, injury of any kind which may result from or arise out of the use of or reliance on the information by any person.

It shall be the responsibility of the customer purchasing this product to ensure that all employees/users of this product be familiar with and trained in the handling, use and hazards associated with this product as contained herein. This responsibility shall also extend directly to the user.