



# BOSCH

160300

## Material Safety Data Sheet

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### Safety information

Robert Bosch Tool Corporation  
Revision: 14.01.2004 Rev.-No.: 1,00  
Battery pack

### 1. Chemical Product And Company Identification

**Product Name:** Lithium-Ion Battery, P/N BAT400 – 499

**Other/Generic Names:** Battery pack

**Manufacturer/Distributor:** Robert Bosch Tool Corporation  
1800 W. Central Road  
Mt. Prospect, IL 60056

**For More Information Call:**

(Monday-Friday, 8:00 AM– 5:00 PM CST)  
Bosch Tools  
Customer Service  
877-267-2499

**In Case Of Emergency Call:**

(24 Hours/Day, 7 Days/Week)  
**(866) 403-6302**

### 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 (inder) 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.



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### **5. Fire-fighting measures**

#### **Suitable extinguishing material**

Water

CO<sub>2</sub>

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**

Fire fighting 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.



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### **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](http://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.

#### **Land transport (ADR/RID)**

The product fulfils the requirements of Special provision 188 of ADR/RID and is therefore, keeping the prescribed quantity limits, excepted from the application of the dangerous goods regulations.

#### **Sea ship**

The product fulfils the requirements of Special provision 188 of the IMDG-Code and is therefore, keeping the prescribed quantity limits, excepted from the application of the dangerous goods regulations.

#### **Air transport**

The product fulfils the requirements of Special provision A 45 of IATA-DGR and is therefore, keeping the prescribed quantity limits, excepted from the application of the dangerous goods regulations. Li-Ion batteries are regulated by ICAO when transported by air.

#### **Other appropriate information**

Disposal of used Lithium batteries according the Multilateral Agreement M 126 (only in the states, who signed this agreement). Li-Ion batteries are regulated as hazardous materials by DOT.

### **15. Other regulations**

#### **Labelling**

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

### **16. Other information**

#### **Disclaimer:**

Although Robert Bosch Tool Corporation has attempted to provide current and accurate information herein, Robert Bosch Tool Corporation 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.