

Current version: 5.0.0, issued: 24.10.2022 Reglaced version: 4.0.0, issued: 12.04.2021 Region: GB

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

#### 1.1 Product identifier

Trade name

# Li-ion Battery Pack Model Number: 18650

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

#### Relevant identified uses of the substance or mixture

battery

#### Uses advised against

No data available.

#### 1.3 Details of the supplier of the safety data sheet

#### Addrass

Eppendorf SE
Barkhausenweg 1
D-22339 Hamburg

Telephone no. +49 40 53801-0

# Information provided by / telephone

email: certificates@eppendorf.com

#### **Advice on Safety Data Sheet**

sdb info@umco.de

#### 1.4 Emergency telephone number

For medical advice (in German and English): +49 (0)551 192 40 (Giftinformationszentrum Nord)

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification information

This product is an article in the sense of Article 3 of Regulation (EC) 1907/2006 (REACH) and is not subject to labelling according to Article 1, Regulation (EC) 1272/2008 (CLP).

Provision of a safety data sheet is not mandatory for articles according to Article 31 of Regulation (EC) 1907/2006 (REACH) and is done on a voluntary basis.

### 2.2 Label elements

Not relevant

#### 2.3 Other hazards

No data available.

# **SECTION 3: Composition/information on ingredients**

# 3.1 Substances

Not applicable. The product is not a substance.

# 3.2 Mixtures

#### **Hazardous ingredients**

This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH),

# **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

#### General information

No special measures necessary. The first aid information refers to the electrolyte solution and is only relevant for leaking batteries.



Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

#### After inhalation

Ensure supply of fresh air. In case of persisting adverse effects consult a physician.

#### After skin contact

In case of contact with skin wash off with water. Get medical attention if pain still persists.

#### After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). In case of irritation consult an ophthalmologist.

#### After ingestion

Rinse the mouth thoroughly with water. Never give anything by mouth to an unconscious person. Do not induce vomiting. Call a doctor.

#### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

Carbon dioxide; Dry chemical extinguisher; Water spray jet; Water mist

#### Unsuitable extinguishing media

High power water jet

## 5.2 Special hazards arising from the substance or mixture

May explode if exposed to heat.

# 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

# **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

#### For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.

# For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

#### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Collect mechanically. Send in suitable containers for recovery or disposal.

# 6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

# Advice on safe handling

Ensure adequate ventilation. When charging the battery, use dedicated charges and follow the specified conditions. Improper charging may cause the battery to flame.

Do not disassemble or modify the battery.

# General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash soiled clothing. Wash hands before breaks and after work.

# Advice on protection against fire and explosion



Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

No special measures necessary.

## 7.2 Conditions for safe storage, including any incompatibilities

## Technical measures and storage conditions

Protect from heat and direct sunlight. Protect against humidity

#### Recommended storage temperature

Value 15 - 25 °C

#### Requirements for storage rooms and vessels

Keep only in the original container.

### Incompatible products

Do not store together with: combustible materials

# 7.3 Specific end use(s)

No data available.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

No parameters available for monitoring.

#### 8.2 Exposure controls

# Appropriate engineering controls

No data available.

#### Personal protective equipment

#### Respiratory protection

No special measures required.

# Eye / face protection

No special measures required.

## **Hand protection**

No special measures required.

#### Other

No special measures required.

### **Environmental exposure controls**

No data available.

**Decomposition temperature** 

No data available

# **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

State of aggregation	
solid	
Form	
solid	
Solid	
Colour	
No data available	
Odom	
Odour	
No data available	
pH value	
No data available	
Boiling point / boiling range	
No data available	
Melting point/freezing point	
No data available	

# EU safety data sheet



Trade name: Li-ion Battery Pack Model Number: 18650

Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

Flash point

No data available

Ignition temperature

No data available

**Flammability** 

No data available

Lower explosion limit

No data available

**Upper explosion limit** 

No data available

Vapour pressure

No data available

Relative vapour density

No data available

Relative density

No data available

Density

No data available

Solubility in water

Source supplier Comments insoluble

Solubility

No data available

Partition coefficient n-octanol/water (log value)

No data available

Kinematic viscosity

No data available

Particle characteristics

No data available

#### 9.2 Other information

Other information

Nominal Voltage: 3,7 V

Nominal Capacity: 24 Ah, 88,8 W

Weight: 416,58 g

# **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

No data available.

#### 10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

#### 10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

# 10.4 Conditions to avoid

Moisture. Heat; Temperatures > 60°C

# 10.5 Incompatible materials

None, if handled according to order.

# 10.6 Hazardous decomposition products



Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

None if stored, handled and transported properly.

# **SECTION 11: Toxicological information**

# 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute oral	toxicity
------------	----------

No data available

### Acute dermal toxicity

No data available

#### Acute inhalational toxicity

No data available

#### Skin corrosion/irritation

No data available

#### Serious eye damage/irritation

No data available

# Respiratory or skin sensitisation

No data available

### Germ cell mutagenicity

No data available

#### Reproduction toxicity

No data available

#### Carcinogenicity

No data available

# STOT - single exposure

No data available

#### STOT - repeated exposure

No data available

# **Aspiration hazard**

No data available

#### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

No data available.

### Other information

No data available.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

## Toxicity to fish (acute)

No data available

# Toxicity to fish (chronic)

No data available

#### Toxicity to Daphnia (acute)

No data available

# **Toxicity to Daphnia (chronic)**

No data available

## Toxicity to algae (acute)

No data available

## Toxicity to algae (chronic)



Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

No data available

**Bacteria toxicity** 

No data available

#### 12.2 Persistence and degradability

No data available.

## 12.3 Bioaccumulative potential

No data available.

# 12.4 Mobility in soil

No data available.

## 12.5 Results of PBT and vPvB assessment

No data available.

#### 12.6 Endocrine disrupting properties

No data available.

# 12.7 Other adverse effects

No data available.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### Product

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

#### **Packaging**

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse. Packaging that cannot be cleaned should be disposed of in agreement with the regional waste disposal company.

# **SECTION 14: Transport information**

# 14.1 Transport ADR/RID/ADN

Class 9
Classification code M4
UN number UN3481

Proper shipping name LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT

Tunnel restriction code E
Label 9A
Comments on
Class 9
Classification code M4
UN number UN3480

Proper shipping name LITHIUM ION BATTERIES

Tunnel restriction code E Label 9A

# 14.2 Transport IMDG

Class 9

UN number UN3481
Proper shipping name LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT

EmS F-A, S-I
Label 9
Comments or
Class 9
UN number UN3480

Proper shipping name LITHIUM ION BATTERIES

EmS F-A, S-I Label 9

# 14.3 Transport ICAO-TI / IATA

Class 9



Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

UN number UN3481

Proper shipping name Lithium ion batteries contained in equipment

 Label
 9

 Class
 9

 UN number
 UN3480

Proper shipping name Lithium ion batteries

Label 9

#### 14.4 Other information

No data available.

#### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

#### 14.6 Special precautions for user

No data available.

#### 14.7 Maritime transport in bulk according to IMO instruments

Not relevant

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU regulations

# Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

### REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the article does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

# Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The product contains following substance(s) that are considered being subject to REACH regulation (EC) 1907/2006 annex XVII.

No	Substance name	CAS no.	EC no.	No
1	Aluminium massive	7429-90-5	231-072-3	75
2	CARBON BLACK	1333-86-4	215-609-9	75
3	copper	7440-50-8	231-159-6	75
4	Graphite	7782-42-5	231-955-3	75

#### Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.

# Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product.

# 15.2 Chemical safety assessment

Not required.

# **SECTION 16: Other information**

# Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

# EU safety data sheet



Trade name: Li-ion Battery Pack Model Number: 18650

Current version: 5.0.0, issued: 24.10.2022 Replaced version: 4.0.0, issued: 12.04.2021 Region: GB

#### Creation of the safety data sheet

UMCO GmbH

Georg-Wilhelm-Str. 187, D-21107 Hamburg

Tel.: +49 40 / 555 546 300 Fax: +49 40 / 555 546 357 e-mail: umco@umco.de

This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

Alterations/supplements:

Alterations to the previous edition are marked in the left-hand margin.

Document protected by copyright. Alterations or reproductions require the express written permission of UMCO GmbH.

Prod-ID 730821