

European Material Safety Data Sheet**ENGLISH**

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Product data	
Trade name:	STIHL AP 80 Battery Pack Lithium ion battery
Product number:	4850-400-6500
Manufacturer:	ANDREAS STIHL AG & Co. KG Badstraße 115 D – 71336 Waiblingen +49 7151 / 26-0 www.stihl.com
Intended use:	Rechargeable battery for electric power tools Only for use with STIHL cordless machines
Specifications:	<ul style="list-style-type: none">▪ Rated voltage: DC 36 V▪ Rated capacity: 2100 mAh▪ Rated energy: 76 Wh▪ Storage temperature: - 20 to + 35 °C▪ Optimum preservation of functionality: + 10 to + 20 °C▪ Weight: 1100 g▪ Number / type of cells: 18-20/ 18650
Device classification / legal basis	Within the territory of the EU, at a minimum, the battery is subject to the following EU directives / regulations in the respectively current version and the national regulations enacted in this regard: <ul style="list-style-type: none">○ Directive on General Product Safety 2001/95/EC○ Batteries and Accumulators Directive 2006/66/EC○ REACH regulation (EC) No. 1907/2006 With regard to the obligations to provide information pursuant to Article 33 of the REACH regulation, please see www.stihl.com/reach .
Certificates / Markings / Standards	
CE marking	At present, the battery is not subject to any regulation that requires a CE marking.
Safety requirements	The battery was tested and certified in accordance with DIN EN 62133: 2003-09.

Important safety information

WARNING:

- Do not open the battery, disassemble it or allow it to fall from a substantial height.
- Protect the battery against short-circuiting – danger of explosion!
- Protect the battery against rain, do not immerse in liquids – danger of short-circuiting
- Protect the battery against direct sunlight, heat and fire.
- Do not incinerate the battery – danger of explosion!
- Do not use defective or deformed batteries.
- Use only original STIHL chargers to charge the battery.

Hazards

- Caustic liquid may escape from damaged batteries. Avoid contact.
- Contact can cause skin irritation, burns and chemical burns.
- If liquid comes into contact with the eyes, seek medical attention.
- Avoid inhaling any vapors formed or released – caustic.

Measures

In the event of contact with released electrolyte or electrolyte vapors

- Eye contact: flush eyes for at least 15 minutes with plenty of clean water without rubbing eyes and consult a physician.
 - Skin contact: wash affected areas of skin with plenty of water and soap; if irritation persists, consult a physician.
 - Inhalation: provide fresh air or administer oxygen immediately and consult a physician.
 - Ingestion: if electrolyte has been ingested, consult a physician immediately.
- ⇒ Disposal: Wear protective gear, wipe up with absorbent textile and dispose of as hazardous waste at collection points for hazardous waste according to national regulations (disposal code EAK: 16 06 05 or 20 01 34).
- ⇒ In case of fire: Keep clear of vapors and gases generated, take wind direction into consideration. If possible without danger, remove batteries from the vicinity of the fire. In principle, cooling or extinguishing with water is possible, but should only be done by trained personnel with sufficiently large quantities of water.
- If the hazard situation is unclear, extinguish only with ABC powder extinguishers (Class D extinguishers for fires involving metals are especially suitable). Fire fighters should only approach the fire wearing protective clothing and self-contained breathing apparatus.
- Once the fire has been extinguished, as a rule, the area should be monitored (fire watch) and cleaned up by trained and appropriately equipped personnel; fire residue should be contained and disposed of properly.

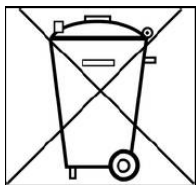
<p>⇒ Information for physicians: Hazardous contents are: caustic alkaline electrolytes contained in cells (lithium salts in organic solvents) with lithium oxide, nickel oxide and cobalt/lithium manganese oxide cathodes, but no lithium metal or lithium alloys</p>																																									
<p>Storage</p> <p>Insert the battery in the machine only when it is in use; always remove the battery from the machine for transport and when it is not in use.</p> <ul style="list-style-type: none"> Storage temperature range: - 20 to + 35 °C <i>Temperatures must not exceed 50 °C.</i> Relative humidity range: 45 to 85 % Optimum preservation of functionality: + 10 to + 20 °C (charge state 2 LEDs green) 																																									
<p>Handling</p> <p>Caution! Improper handling can lead to an explosion or ignite a fire! Store batteries out of reach of children. Please contact a STIHL servicing dealer for maintenance and/or repairs.</p> <p><u>Note LEDs on battery:</u></p> <ul style="list-style-type: none"> 4 red flashing for approx. 5 seconds: Battery defective; insert battery 1 green flashing: Battery discharged, charge battery 1 red steady on: Battery is too warm or too cold: allow to cool down or warm up respectively (battery cannot be charged in this state) 3 red flashing: Device is defective, have it checked by a servicing dealer 																																									
<p>Transport Road / Rail / Sea / Air (ADR/RID/ IMDG /IATA)</p> <p><u>Transport according to laws on hazardous goods:</u></p> <p>Road / Rail</p> <table border="0"> <tr> <td>Battery (alone)</td> <td>UN 3480</td> <td>Lithium ion batteries, 9, II, (E)</td> </tr> <tr> <td>Batteries (packed with machine)</td> <td>UN 3481</td> <td>Lithium ion batteries, packed with equipment, 9, II, (E)</td> </tr> <tr> <td>Packaging order</td> <td>P903</td> <td></td> </tr> <tr> <td rowspan="3">Special provisions</td> <td>SV 230</td> <td>Transport requirements</td> </tr> <tr> <td>SV 188</td> <td>Possible exemptions</td> </tr> <tr> <td>SV 636</td> <td>Transportation of used batteries</td> </tr> <tr> <td rowspan="2">Further exemptions</td> <td>E0</td> <td>not possible</td> </tr> <tr> <td>LQ0</td> <td>not possible</td> </tr> </table> <p>Sea transport</p> <table border="0"> <tr> <td>Battery (alone)</td> <td>UN 3480</td> <td>Lithium ion batteries, 9, II</td> </tr> <tr> <td>Batteries (packed with machine)</td> <td>UN 3481</td> <td>Lithium ion batteries, packed with equipment, 9, II</td> </tr> <tr> <td>Packaging order</td> <td>P903</td> <td></td> </tr> <tr> <td rowspan="3">Special provisions</td> <td>SV 230</td> <td>Transport requirements</td> </tr> <tr> <td>SV 188</td> <td>Possible exemptions</td> </tr> <tr> <td>E0</td> <td>not possible</td> </tr> <tr> <td>Further exemptions</td> <td>LQ0</td> <td>not possible</td> </tr> </table>		Battery (alone)	UN 3480	Lithium ion batteries, 9, II, (E)	Batteries (packed with machine)	UN 3481	Lithium ion batteries, packed with equipment, 9, II, (E)	Packaging order	P903		Special provisions	SV 230	Transport requirements	SV 188	Possible exemptions	SV 636	Transportation of used batteries	Further exemptions	E0	not possible	LQ0	not possible	Battery (alone)	UN 3480	Lithium ion batteries, 9, II	Batteries (packed with machine)	UN 3481	Lithium ion batteries, packed with equipment, 9, II	Packaging order	P903		Special provisions	SV 230	Transport requirements	SV 188	Possible exemptions	E0	not possible	Further exemptions	LQ0	not possible
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Air transport

Battery (alone)	UN 3480	Lithium ion batteries, 9, II
Batteries (packed with machine)	UN 3481	Lithium ion batteries, packed with equipment, 9, II
Packaging order	P965 Part 1 (alone)	
	P966 Part 1 (packed with equipment)	
Exemptions	P965 Part 2 (alone)	
	P966 Part 2 (packed with equipment)	
	E0	not possible

Please note individual national regulations as well as exceptions on the basis of national adoption of multilateral agreements.

Distributor take-back / disposal



- On the basis of the Battery Directive, the manufacturers take responsibility for financing collection, treatment and recycling of batteries used in devices. To this end, batteries must be handed over for disposal to the collection systems established for this under national law. Disposal of batteries together with household waste is prohibited; batteries must be collected separately according to type.

Return the battery free of charge to your STIHL servicing dealer for disposal or hand it over to an appropriate public collection point.

- IMPORTANT:**

Only batteries that have been discharged so that there is no voltage present at the external contacts can be returned. Batteries that are only partially discharged must be returned protected against short-circuiting (sturdy cardboard packaging, ideal: original box; alternatively: original STIHL plastic bag).

Miscellaneous

Independent laboratory tests have established that the battery cases do not contain any PAHs and that the electronic components comply with the RoHS standards (Directive 2002/95/EC of 27 January 2003) (no Hg, Cd, Pb or Cr).

The information in this data sheet does not constitute guaranteed product properties, but instead is furnished solely as a courtesy to the user. It is believed to be accurate on the basis of the currently valid regulations.

This data sheet was produced in cooperation with the firm Umweltkanzlei Dr. Rhein, Sarstedt.

www.umweltkanzlei.de

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