



Service Manager Bulletin

TITLE:

**LITHIUM-ION POLYMER BATTERY Safety Data Sheet for
Shipping and Handling**

GROUP:
31

NO:
001A

ISSUING DEPARTMENT:

CAR MARKET:
United States

REVISIONS:
New Safety Data Sheet

ISSUE DATE:
2016-05-03

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2021-05-11

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“Right first time in Time”

This SDS is required for the shipping of the Lithium-ion battery. In this process, a copy of the SDS document must be on the outside of the shipment crate and a copy of it must be given to the FedEx driver.

Print pages 2 – 6 of this Service Manager Bulletin (SDS Document)



Safety Data Sheet

Model P34(34Ah) LITHIUM-ION POLYMER BATTERY

Volvo Car USA, LLC
1 Volvo Drive
P.O. Box 914
Rockleigh, NJ 07647

Emergency
Telephone No.: **1-888-255-3924 (U.S., Canada,
Puerto Rico and the U.S. Virgin Islands)**

Revision Date: 2021-02-19
Printed: 2021-05-10
Supersedes:

NOTE: Use the 24-Hour Emergency Telephone Numbers **only in the event of a chemical emergency involving a spill, leak, fire, exposure, or accident involving chemicals.** All non-emergency questions should be directed to Volvo Car USA, LLC at (201) 768-7300 (U.S.) or (416) 498-3700 (Canada) for assistance.

1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME: LG ENERGY SOLUTION MODEL P34(34AH) LITHIUM-ION
POLYMER BATTERY**

PART NO: 36003338, 36003341, 36010547, 36003340, 36003346, 36010548

SUPPLIER: LG Energy Solution, Ltd.
Parc.1 Tower1, 108, Yeoui-daero, Yeongdeungpo-gu
Seoul, 07335
Korea

PHONE No: 82-2-3773-1114
E-MAIL ADDRESS: Byeongmin@lgensol.com
Emergency Telephone No.: 82-2-3773-1114

2. HAZARDS IDENTIFICATION

Emergency overview: May explode in a fire, which could release hydrogen fluoride gas. Use extinguishing media suitable for materials burning in fire.

Primary routes of entry

Skin contact: No
Skin absorption: No
Eye contact: No
Inhalation: No
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.
Reported as carcinogen: Not applicable.



PRODUCT NAME: Model P34(34Ah) Lithium-ion polymer battery

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3. COMPOSITION INFORMATION

Hazardous Ingredients	%	Cas Number
Aluminum Foil	2-10	7429-90-5
Metal Oxide (proprietary)	20-50	
Polyvinylidene Fluoride (PVDF)	<5	24937-79-9
Copper Foil	5-20	7440-50-8
Carbon (proprietary)	10-30	7440-44-0
Electrolyte (proprietary)	10-30	
Aluminum, Copper plate and inert materials	Remainder	N/A
PE(Polyethylene)	<10	9002-88-4
PP(Polypropylene)	<10	9003-07-0

Lithium-equivalent Content: 15.0g(123Wh)

4. FIRST-AID MEASURES

Inhalation:	Not a health hazard.
Eye contact:	Not a health hazard.
Skin contact:	Not a health hazard.
Ingestion:	If swallowed, obtain medical attention immediately.

IF EXPOSURE TO INTERNAL MATERIALS WITHIN CELL 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:	Battery is not flammable but some internal organic materials will burn if the cell does incinerated.
Extinguishing media:	Use large amounts of water or CO2 extinguisher for battery related fire. Use an ABC extinguisher suitable if other materials are involved in a fire. If combustive metals such as Mg, Na, K are involved in a fire, do not use water. Hydrogen gas may be evolved and there can be an explosion. Use LITH-X, copper powder fire extinguishers or sand which can act as smothering agents for metal-related fire. <i>* LG Energy Solution lithium ion polymer battery does not contain any metallic lithium. Therefore, ordinary extinguisher can be used to extinguish a fire.</i>

**PRODUCT NAME: Model P34(34Ah) Lithium-ion polymer battery****REVISION DATE: 2021-02-19****Fire-fighting instructions:**

If a fire occurs during battery charge, shut off the power to charger.
If possible, remove batteries from the fire fighting area. If the batteries are heated above 150°C, there may be a vent or an explosion. Water is effective to cool down the batteries and around area.

Use NIOSH/MSHA approved full-face self-contained breathing apparatus (SCBA) with full protective gear. Hazardous fumes including carbon monoxide, carbon dioxide, various hydrocarbons and HF can be generated during a fire.

6. ACCIDENTAL RELEASE MEASURES

On land: Place material into suitable containers and call local fire/police department.
In water: 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 PROTECTION

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: N/A
Vapor density: N/A
Boiling point: N/A
Solubility in water: Insoluble.
Specific gravity: N/A
Density: N/A

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10. STABILITY AND REACTIVITY

Reactivity: None.

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

Hazardous decomposition products: None during normal operating conditions. If cells are damaged, 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 elicit toxicological properties during routine handling and use.

Sensitization
NO

Teratogenicity
NO

Reproductive toxicity
NO

Acute toxicity
NO

If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.

12. ECOLOGICAL INFORMATION

Some materials within the cell are bioaccumulative. Under normal conditions, these materials are contained and pose no risk to persons or the surrounding environment.

13. DISPOSAL CONSIDERATIONS

California regulated debris

RCRA waste code: Non-regulated.

Dispose of according to all federal, state, and local regulations.

14. TRANSPORT INFORMATION

UN No. 3480

Proper shipping name: Lithium Ion Batteries

Class 9 Packing Group II hazard label:

Miscellaneous

ICAO/IATA

Packing instruction: 965

Maximum gross weight per package on passenger and cargo aircraft:

5 kg

Maximum gross weight per package on cargo only aircraft:

35 kg

Special provision: A45, A88, A99



SDS-LIB

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PRODUCT NAME: Model P34(34Ah) Lithium-ion
polymer battery

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IMO

Packing instruction: P903
Special provision: 188, 230, 310, 957
EmS: F-A, S-I

US DOT

This product is not subject to any other requirements of dangerous goods under 49 CFR 173.185 (Lithium Batteries and Cells).

15. REGULATORY INFORMATION

**OSHA hazard communication
standard (29 CFR 1910.1200):** Hazardous

16. OTHER INFORMATION

For further information, see: For more information, consult the Technical Data Sheet (www.lgensol.com).

**Sources of key data used to
compile the datasheet:** Information contained in this safety data sheet is based on LG Energy Solution owned data and public sources deemed valid or acceptable. The absence of data elements indicates, that no data meeting these requirements is available.

Further information: This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality.