

To whom it may concern:

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**Notification of Non-dangerous Goods based on the UN
Recommendation**

Product: Valve Regulated Lead Acid Battery

This notification refers to treat Valve Regulated Lead Acid Battery described above as non-dangerous goods for transportation by boat and/or air. After our own test, we judge these batteries are satisfied with the special provision 238 added UN No. 2800 as given below. Also IATA satisfies this battery with the special provision A 48, A 67, A 164, A183 prescribed in DANGEROUS GOODS REGULATIONS.

UN2800 SPECIAL PROVISIONS 238: Batteries can be considered as non-spillable provided that they are protected against short circuits, are securely packaged and are capable of withstanding the vibration and pressure differential tests given below, without leakage of battery fluid.

Vibration test: The battery is rigidly clamped to the platform of a vibration machine and a simple harmonic motion having an amplitude 0.8 mm (1.6 mm maximum total excursion) is applied. The frequency is varied at the rate of 1 Hz/min between the limits of 10 Hz to 55 Hz. The entire range of frequencies and return is traversed in 95±5 minutes for each mounting position (direction of vibration) of the battery. The battery must be tested in three mutually perpendicular positions (to include testing with openings and vent, if any, in an inverted position) for equal time periods.

Pressure differential test: Following the vibration test, the battery is stored for six hours at 24±4 deg.C while subjected to a pressure differential of at least 88 kPa. The battery must be tested in three mutually perpendicular positions (to include testing with fill openings and vents, if any, in an inverted position) for at least six hours in each position.

Note: Non-spillable type batteries which are an integral part of and necessary for the operation of mechanical or electronic equipment are exempt the requirements of this packing instruction provided they are protected in such a manner as to prevent damage and short circuits.

Non-spillable batteries are not subject to these Recommendations if, at a temperature 55 deg.C, the electrolyte will not flow and if, when packaged for transport, the terminals are protected from short circuit.

Note: This notification is only described for transportation of Valve Regulated Lead Acid batteries. Therefore this notification is free from specification and/or drawing of Lead Acid Batteries.

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