

# Product Safety Data Sheet

## 1. Chemical Product and Company Identification

Product Valve Regulated Lead Acid Battery  
Panasonic LC,UP,HV and EC Series

Company Name Panasonic Storage Battery Co. Ltd.

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Issued No. 1364-2

## 2. Composition / Information on Ingredient

### Hazards Ingredients

Specific Chemical Identity	% by Wt.	CAS No.
Lead	40 - 60	7439-92-1
Lead Dioxide	15 - 40	1309-60-0
Sulfuric Acid	25 - 45	7664-93-9

## 3. Hazard Identification

Classification N/A

Dangerous Battery may explode upon contact with fire.

Hazardous Electrolyte (Sulfuric Acid) may cause burn upon skin contact and blindness upon eye contact.

Environment Electrolyte (Sulfuric Acid) may cause severe damage on animal and plant Damage due to strong acid.

## 4. First Aids Measures

Eyes Immediately rinse with cool running water for at least 15min.  
Seek medical attention after rinsing.

Skin Immediately wash thoroughly with soap and water.  
Seek medical attention if burned.

Ingestion Immediately wash mouth and give large quantities of water.  
Seek medical attention.  
Do NOT induce vomiting.  
Do NOT neutralize acid.

## 5. Fire Fighting Measures

Fight a fire with powder, foam and/or noninflammable gas fire extinguisher.

## 6. Accidental Release Measures

Spillage of Electrolyte(Sulfuric Acid)  
Neutralize spilled electrolyte with sodium bicarbonate, lime, etc. and flush with large quantities of water.  
(Wear acid-resistant faceshield, gloves and boots.)

## 7. Handling and Storage

Handling	Keep away from fire and sparks. Do NOT short terminal. Charge battery in well ventilated areas.
Storage	Store battery in cool and dry areas. Batteries should also be stored under protection against rain, dew and sunlight. Keep away from fire, dust source, harmful gas and immersion.

## 8. Exposure Controls / Personal Protection

Not applicable for Valve Regulated Lead Acid Battery

## 9. Physical & Chemical Properties

Not applicable for Valve Regulated Lead Acid Battery

Reference (Component)

	Electrolyte (Sulfuric Acid)	Lead
Appearance	Clear	Silvery solid
Specific Gravity	1.280 - 1.320 (38 - 42 %)	11.3
Boiling Point	110 °C (34.6 %)	1740 °C
Melting Point	- 40 °C or below	327 °C
Solidifying Point	- 56.4 °C (34.6 %)	-
Vapor Pressure	3.17 Pa (30 %)	0.1 Pa or less (25 °C)

## 10. Stability and Reactivity

Correspond to section 3

## 11. Toxicological Information

Correspond to section 3

## 12. Ecological Information

Correspond to section 3

## 13. Disposal Considerations

Send to lead smelter for reclamation following applicable state and local law and regulations.

## 14. Transport Information

If possible, avoid consolidated transportation with other material.  
Handle with care to avoid acid spillage due to drop and/or upset.  
Be aware of battery weight and take care of battery handling.

UN Recommendation on transportation

	DOT	IATA
UN Number	2800	2800
Class	8 (Corrosive)	8 (Corrosive)
Special Provision	238	A48, A67,A164

Note : Valve Regulated Lead Acid Batteries described above are regarded 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. Also these batteries are satisfied with the IATA's special provisions A 48, A 67, A 164 prescribed in DANGEROUS GOODS REGULATIONS.

## 15. Regulatory Information

California Proposition 65

The state of California has determined that certain battery terminals contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm.

**IMPORTANT : WASH HANDS THOROUGHLY AFTER WORKING WITH BATTERIES AND BEFORE EATING, DRINKING OR SMOKING.**

TSCA

Not applicable for Valve Regulated Lead Acid Battery

## 16. Other Information

Notice to readers

This information has been compiled from sources considered to be dependable and is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty (either expressed or implied) or guarantee is made to the accuracy, reliability or completeness of the information contained herein. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. It is the use's responsibility to satisfy himself as to the suitability and completeness of this information for his own particular use.

Electrochemical equation

