Safety Data Sheet

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

1.1. Product identifier

Name: Valve Regulated Lead Acid Battery. Proper

Shipping name: Lead and lead oxide, SOLID. Other

1.2. Company Identification

Supplier:	**Wilmar LLC**
Address:	20413 59th Pl S. Suite 160, Kent, WA 98032, USA
Telephone:	(800) 426-1262
E-mail:	tools@wilmarllc.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Category	Exposure Route
Skin Corrosive	IA	-
Acute Toxicity(Oral)	4	-
Acute Toxicity(Tnhalation)	4	-
Chronic Aquatic	2	-

Classification according to Directive 67/548/EEC or 1999/45/EC

Risk codes	Risk phrases
R34	Causes burns.
R20/22	Harmful by inhalation and if swallowed.
RS1/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Other adverse physicochemical, human health and environmental effects

No reliable data available.

2.2. Other hazards

No reliable data available.

SECTION 3: Composition/information on ingredients

3.I. Substances

Not applicable

3.2. Mixtures

Chemical ingredient	Molecular formula	Content (about)	CAS No.
Lead and lead oxide	Pb, PbO2	60-70	7439-92-1, 1309-60-0
Calcium	Ca	<0.15	7440-70-2
Tin	Sn	<1	7440-31-5
Sulfuric acid	H2SO4	10-15	7664-93-9
ABS	-	5-10	9003-56-9
AGM separator	-	3-4	-

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. Get medical attention.

Skin contact: Immediately wash with plenty of soap and water. Get medical attention if irritation occurs.

Eye contact: Immediately flush eyes with running water for at least 20 minutes holding eyelids open. Get medical attention.

Ingestion: Do not induce vomiting. Give 1-2 glasses of water to a conscious victim. Never give anything by mouth to an unconscious victim. Get medical attention.

Advice for the doctor: Symptomatic treatment.

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

Harmful by inhalation and if swallowed; Causes burns;
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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

No reliable data available.

SECTION 4: First aid measures

5.1. Extinguishing media

Foam.
Dry chemical powder.
Carbon dioxide.
Water spray or fog - large fires only.

5.2. Special hazards arising from the substance or mixture

Fire/explosion hazard: Emits toxic fumes under fire conditions.
Characteristics of Hazard :Toxic fumes; gases or vapors may evolve on burning.
Hazardous Combustion Products:CO, CO2, acid, hydrogen and oxygen gas
Fire-extinguishing Methods and Extinguishing Media,Carbon dioxide, dry chemical powder, or appropriate foam.
Attention in Fire-extinguishing:The Firemen should put on antigas masks and full fire-fighting suits.

5.3. Advice for firefighters

Alert Fire Department and tell them location and nature of hazard.
Wear breathing apparatus plus protective gloves.
Prevent, by any means available, spillage from entering drains or water courses.
Use water delivered as a fine spray to control fire and cool adjacent area.
DO NOT approach containers suspected to be hot.
Cool fire exposed containers with water spray from a protected location.
Only when safe to do so, remove containers from path of fire.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Wear suitable protective equipment.

6.1.2. For emergency responders

Remove ignition sources and provision of sufficient ventilation, evacuate the danger area and consult experts.

6.2. Environmental precautions

Take precautions to prevent entry into waterways, sewers, or surface drainage systems. Dispose according to local or international regulations.

6.3. Methods and material for containment and cleaning up

Use appropriate tools to put the spilled solid in suitable container for recovery or disposa.

6.4. Reference to other sections

Refer to Section 8 for Personal Protective Equipment advice.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid ingestion, inhalation, skin and eye contact. Handle in accordance with good industrial hygiene practice and any legal requirements. Don't handle the batteries in manner that allows terminals to short circuit

7.2. Conditions for safe storage, including any incompatibilities

Suitable container: Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.

Storage incompatibility: Avoid reaction with strong acid, alkali and oxidizing agents.

Store and use far away from heat, sparks, open flame, or other heat ignition sources, and below high temperatures (<30°C) in ventilating and dehumidifying environments

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

At this time no TLV of this mixture has been established, even though this material may produce adverse health effects (as evidenced in animal experiments or clinical experience). Airborne concentrations must be maintained as low as practically possible and occupational exposure must be kept to a minimum.

Substance	PbO_2			
GAS No.	1309-60-0			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m^3	ppm	mg/m^3
Austria		2 inhalable aerosol		
Belgium				2
Canada - Quebec				2(1)
Denmark		2		2
European Union				
France				2
Hungary		2		2
Poland		0.5		1
Singapore				
Spain				
Sweden		1		(2)
Switzerland		2 inhalable aerosol		
USA- NIOSH				2(1)
United Kingdom				2

Substance	$H_2SO_•$			
GAS No.	7664-93-9			
	Limit value - Eight hours		Limit value - Short term	
	ppm	mg/m^3	ppm	mg/m^3
Belgium		2		
Canada - Quebec		2		
Denmark		2.5 respirable aerosol		5 respirable aerosol
France		2 respirable aerosol		
Germany (DFG)		4 inhalable aerosol		
		1,5 respirable aerosol		
Singapore		2 respirable aerosol		

Spain		2 inhalable aerosol		
Sweden		5 inhalable aerosol		
Switzerland		5 inhalable aerosol		
		2,5 respirable aerosol		
USA- NIOSH		2,5 (1)		
USA-OSHA		15 total dust		
		5 respirable dust		
United Kingdom		10 inhalable aerosol		
		4 respirable aerosol		

8.2. Exposure controls

Appropriate engineering controls: Process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits.

General Personal Protection: Safety goggles or face shield, protective chemical resistant gloves, protective clothing.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Solid
Color:	No data available
Odor:	No data available
Oduour threshold	No data available
pH:	No data available
Melting point:	>300 degrees Celsius
Boiling point:	No data available
Flash point:	No data available
Evapotation rate:	No data available
Flammability (solid, gas):	No data available
Upper/lower flammability:	No data available
Explosive limits:	No data available
Vapour pressure:	No data available
Relative density:	No data available
Solubility(ies):	No data available
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Viscosity:	No data available

Explosive properties:	No data available
Oxidising properties:	No data available

9.2. Other information EN L 133/22 Official Journal of the European Union 31.5.2010

No additional data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

See section 7.2

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

See section 7.2

10.4. Conditions to avoid

Heat, sparks, flames, elevated temperatures, Contact with incompatible materials.

10.5. Incompatible materials

See section 7.2

10.6. Hazardous decomposition products

Thermal decomposition products: carbon monoxide and carbon dioxide gases.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity:	Lead Dioxide
Skin corrosion/irritation:	Lead Dioxide: Skin irritation
Serious eye damage/irritation:	Sulfuric Acid: Eye irritation: highly corrosive
Respiratory or skin sensitization:	Sulfuric Acid: sensitizing
Carcinogenicity:	No data available
Reproductive toxicity:	No data available
Specific target organ toxicity (single exposure):	No data available
Specific target organ toxicity (repeated exposure):	No data available
Aspiration hazard:	No data available

SECTION 12: Ecological information

12.1. Toxicity

Acute (short-term) toxicity:

Sulfuric Acid:

Fish (Oncorhynchus mykiss, 96h): LCS0 > 100(% v/v saturated solution) OECD Guideline 203

Crustacea (Daphnia Magna, 48h): ECS0 > 0.0735 mg/l (OECD TG 202)

Algae/aquatic plants (Desmodesmus subspicatus, 72h): ECS0 > 100 other: v/v saturated solution

12.2. **Persistence and degradability**

Abiotic Degradation: No data available

Physical- and photo-chemical elimination: No data available

Biodegradation: No data available

12.3. Bioaccumulative potential

LEAD: The toxic effects of lead are accumulative and slow to appear. It affects the kidneys, reproductive, and central nervous system

12.4. Mobility in soil

Known or predicted distribution to environmental compartments: No data available

Surface tension: No data available

Adsorption/Desorption: No data available

12.5. Results of PBT and vPvB assessment No data available.

12.6. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal: Refer to specific national regulation.
Contaminated packaging: Contaminated, empty containers must be disposed of as chemical waste.

SECTION 14: Transport information

Land transport (ADR /RID/ GGVSE)

14.1. UN number: UN2800

14.2. UN proper shipping name: Batteries, wet, Non-spillable

14.3. Transport hazard class(es): 8

14.4. Packing group: III

14.5. Environmental hazards: Corrosive

14.6. Special precautions for user: No data available

Air transport (ICAO-IATA / DGR)

14.1. UN number: UN2800

14.2. UN proper shipping name: Batteries, wet, Non-spillable

14.3. Transport hazard class(es): 8

14.4. Packing group: III

14.5. Environmental hazards: Corrosive

14.6. Special precautions for user: No data available

Sea transport (IMDG-Code / GGVSee)

14.1. UN number: UN2800

14.2. UN proper shipping name: Batteries, wet, Non-spillable

14.3. Transport hazard class(es) : 8

14.4. Packing group: III

14.5. Environmental hazards: Corrosive

14.6. Special precautions for user: Limited Quantities II

Inland waterways transport (ADNR / River Rhine)

14.1. UN number: UN2800

14.2. UN proper shipping name: Batteries, wet, Non-spillable

14.3. Transport hazard class(es): 8

14.4. Packing group: III

14.5. Environmental hazards: Corrosive

14.6. Special precautions for user: No data available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

This safety data sheet is in compliance with the following EU legislation and its adaptations - as far as applicable - 67/548/EEC, 1999/45/EC, Regulation (EC) No 1272/2008, Regulation (EC) No 1907/2006, 98/24/EC, 92/85/EEC, 94/33/EC, 91/689/EEC and 1999/13/EC.

15.1.2. International/National regulations

UN Transport of Dangerous Goods.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

SECTION 16: Other information

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their purposes.

Although reasonable precautions have been taken in the preparation of the data contained herein, it is offered solely for your information, consideration and investigation. This safety data sheet provides guidelines for the safe handling and use of this product; it does not and cannot advise on all possible situations, therefore, your specific use of this product should be evaluated to determine if additional precautions are required.