

# **SAFETY DATA SHEET**

# 1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

### 1.1 Product identifier

**Product name** 

VALVE REGULATED, LEAD ACID – AGM

Synonyms M6 MEGA POWER RIDE (MOTORCYCLE BATTERY)

# 1.2 Uses and uses advised againstUsesBATTERIES

# 1.3 Details of the supplier of the product

Supplier name	HCB TECHNOLOGIES LTD				
Address	19 Timberly Road, Mangere, Auckland, NEW ZEALAND				
Telephone	+64 9 622 0033				
Email	sales@hcb.co.nz				
Website	https://www.hcb.co.nz				

#### 1.4 Emergency telephone numbers

Emergency +64 9 622 0033

# 2. HAZARDS IDENTIFICATION

NEW ZEALAND: Batteries are considered to be manufactured articles and are not, therefore, covered by the HSNO Act. Although they may contain hazardous substances, the item has an end use function wholly dependent on its shape and design, which does not involve the intentional release of any hazardous component. Also, the primary function of the article does not lead to any (HSNO) hazardous effect. Hazards arising during transport will still be controlled, as the local transport legislation picks up the international requirements. Disposal issues will be covered by the MfE hazardous waste programme and local authority requirements.

#### 2.1 Classification of the substance or mixture

NON HAZARDOUS ACCORDING TO NZ ENVIRONMENTAL PROTECTION AUTHORITY CRITERIA

#### **Physical Hazards**

Corrosive to Metals: Category 1

#### **Health Hazards**

Acute Toxicity: Inhalation: Category 4 Acute Toxicity: Oral: Category 3 Carcinogenicity: Category 1 Germ Cell Mutagenicity: Category 2 Serious Eye Damage / Eye Irritation: Category 1 Skin Corrosion/Irritation: Category 1B Specific Target Organ Toxicity (Repeated Exposure): Category 1 Specific Target Organ Toxicity (Single Exposure): Category 3 (Respiratory Irritation) Toxic to Reproduction: Lactation effects Toxic to Reproduction: Category 1

#### **Environmental Hazards**

Aquatic Toxicity (Acute): Category 1 Aquatic Toxicity (Chronic): Category 1

DANGER

#### 2.2 GHS Label elements

Signal word

ChemAlert.



Hazaro statemen	IS
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H362	May cause harm to breast-fed children.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### **Prevention statements**

Pictograms

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P234	Keep only in original packaging.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P263	Avoid contact during pregnancy and while nursing.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

#### **Response statements**

P301 + P330 + P331 P303 + P361 + P353	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313	IF exposed or concerned: Get medical advice/ attention.
P310	Immediately call a POISON CENTRE or doctor/physician.
P321	Specific treatment is advised - see first aid instructions.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
Storage statements	
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

#### P406 Store in corrosive resistant container with a resistant inner liner.

#### **Disposal statements**

P501

Dispose of contents/container in accordance with relevant regulations.

#### 2.3 Other hazards

NOTE: Hazard statement relates to battery contents. Potential for exposure should not exist unless the battery leaks, is exposed to high temperatures or is mechanically, physically or electrically abused.

# 3. COMPOSITION/ INFORMATION ON INGREDIENTS

#### 3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
INORGANIC LEAD/ LEAD COMPOUNDS	7439-92-1	231-100-4	69.8%
DILUTE SULPHURIC ACID	7664-93-9	231-639-5	23.95%
GLASS, OXIDE	65997-17-3	266-046-0	1.1%
TIN	7440-31-5	231-141-8	0.45%
CALCIUM	7440-70-2	231-179-5	0.1%



2-PROPENENITRILE, POLYMER WITH 1,3-BUTADIENE AND ETHENYLBENZENE	9003-56-9	618-371-8	<4.6%
POLYPROPYLENE	9003-07-0	618-352-4	<4.6%

**Ingredient Notes** The materials contained in this product may only represent a hazard if the integrity of the cell or battery is compromised; physically or electrically abused.

# 4. FIRST AID MEASURES

#### 4.1 Description of first aid measures

- **Eye** Exposure to contents: If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes.
- Inhalation Exposure to contents: If inhaled, remove from contaminated area. To protect rescuer, use a Type B (Inorganic and acid gas) respirator where an inhalation risk exists. Apply artificial respiration if not breathing.
- Skin Exposure to contents: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a Poisons Information Centre or a doctor.
- Ingestion For advice, contact the National Poisons Centre on 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting.
- First aid facilities Eye wash facilities and safety shower are recommended.

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

The electrolyte is corrosive and may cause irritation or severe chemicals burns. Lead is a cumulative poison and has the potential to cause chronic health effects. Chronic exposure may result in blood, kidney and central nervous system/brain damage. Lead is classified as possibly carcinogenic to humans (IARC Group 2B). May cause harm to the unborn child. Possible risk of impaired fertility.

#### 4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

# 5. FIRE FIGHTING MEASURES

#### 5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

#### 5.2 Special hazards arising from the substance or mixture

Non flammable. Liquid component may evolve flammable hydrogen gas upon contact with metals. The potential for fire - explosion does exist through short circuit of terminals.

#### 5.3 Advice for firefighters

Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.

#### 5.4 Hazchem code

2R

- 2 Fine Water Spray.
- R Wear liquid-tight chemical protective clothing and breathing apparatus. Dilute spill and run-off.

# 6. ACCIDENTAL RELEASE MEASURES

#### 6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS. Contact emergency services where appropriate.

# 6.2 Environmental precautions

Prevent product from entering drains and waterways.

#### 6.3 Methods of cleaning up

Contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

#### 6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.



# 7. HANDLING AND STORAGE

#### 7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas. Keep from all metallic articles that could contact the negative and positive terminals on a battery and create a short circuit condition.

#### 7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances, heat or ignition sources and foodstuffs. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Check regularly for leaks or spills. Large storage areas should have appropriate ventilation systems. Due to the battery's low internal resistance and high power density, high levels of short circuit current can be developed across the battery terminals. Do not rest tools or cables on the battery. Use insulated tools only. Follow all installation instructions and diagrams when installing or maintaining battery systems.

#### 7.3 Specific end uses

No information provided.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

#### 8.1 Control parameters

#### Exposure standards

Ingredient	Reference	Т	VA	STEL	
	IVEIEIEIICE	ppm	mg/m³	ppm	mg/m³
Acrylonitrile	WES [NZ]	2	4.3		
Lead, inorganic dusts & fumes, as Pb	WES [NZ]		0.1		
Sulphuric acid	WES [NZ]		0.1		
Tin metal	WES [NZ]		2		
Tin metal, organic compounds, as Sn	WES [NZ]		0.1		0.2
Tin metal, oxide & inorganic compounds except SnH4	WES [NZ]		2		

#### **Biological limits**

Ingredient	Determinant	Sampling Time	BEI
LEAD	Lead in blood	Not critical	200 µg/L
	Lead in blood (women of child bearing potential)	Not critical	10 µg/100ml
	Lead in blood	Not critical	30 µg/dL
	Lead in blood (women of child bearing potential)	Not critical	10 µg/dL

Reference: ACGIH Biological Exposure Indices

#### 8.2 Exposure controls

**Engineering controls** Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended.

#### PPE

Eye / Face	Wear safety glasses.
Hands	Wear PVC or rubber gloves.
Body	Not required under normal conditions of use.
Respiratory	Where an inhalation risk exists, wear a Type B (acid gas and vapours) respirator.



# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties



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information on basic physical a	na chemical propertie
Appearance	SOLID (BATTERY)
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
рН	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT AVAILABLE
Lower explosion limit	NOT AVAILABLE
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

# **10. STABILITY AND REACTIVITY**

#### 10.1 Reactivity

May be corrosive to metals.

#### 10.2 Chemical stability

Stable under recommended conditions of storage.

#### 10.3 Possibility of hazardous reactions

Hazardous polymerisation is not expected to occur.

#### 10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

#### 10.5 Incompatible materials

Incompatible with oxidising agents (e.g. hypochlorites), alkalis (e.g. sodium hydroxide), heat and ignition sources.

#### 10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

# **11. TOXICOLOGICAL INFORMATION**

#### 11.1 Information on toxicological effects

Acute toxicity Exposure to battery contents may result in severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. Lead compounds are expected to be toxic if swallowed and harmful if inhaled.

#### Information available for the ingredients:

Not classified as causing skin or respiratory sensitisation.

Ingredient		Oral LD50	Dermal LD50	Inhalation LC50
INORGANIC L	EAD/ LEAD COMPOUNDS	50 mg/kg to 600 mg/kg (calf)		
DILUTE SULP	HURIC ACID	2140 mg/kg (rat)		18 mg/m³ (guinea pig); 510 mg/m3/2hrs (rat)
Skin	Due to product encapsula	tion, the potential for skin	contact with contents is re-	educed. If the container is

Due to pr	oduct er	ncapsulation,	the pote	ntial for s	skin contact	with conte	ents is red	uced. If the	container is
damaged,	contact	may result in	irritation	redness,	pain, rash,	dermatitis	and possib	le burns. Ef	fects may be
delayed.					• • •		·		2

**Eye** Due to product encapsulation, the potential for eye contact with contents is reduced. If the container is damaged, direct contact may result in irritation, lacrimation and burns.

Sensitisation

# ChemAlert.

Mutagenicity	Due to product encapsulation, the potential for contact with contents is reduced. If the container is damaged, contact with contents is suspected of causing genetic defects.
Carcinogenicity	Due to product encapsulation, the potential for exposure to the contents is reduced. Occupational exposure to strong inorganic acid mists containing sulphuric acid is classified as carcinogenic to humans (IARC Group 1). Lead compounds (inorganic) are classified as probably carcinogenic to humans (IARC Group 2A).
Reproductive	Due to product encapsulation, the potential for exposure to the contents is reduced. Exposure to high levels of lead and its compounds may cause adverse effects on male and female fertility, including adverse effects on sperm quality. Prenatal exposure to lead and its compounds is also associated with adverse effects on neurobehavioral development in children. May cause harm to breastfed babies.
STOT - single exposure	Due to product encapsulation, the potential for exposure is unlikely. If the container is damaged, inhalation may result in mucous membrane irritation of the respiratory tract, coughing and inflammation. High level exposure may result in ulceration of the respiratory tract and lung tissue damage.
STOT - repeated exposure	Due to product encapsulation, the potential for exposure to the contents is reduced. Lead is a cumulative poison and may be absorbed into the body through ingestion or inhalation. Lead has been documented in observational human studies to produce toxicity in multiple organ systems and body function including the haematopoietic (blood) system, kidney function, reproductive function and the central nervous system.
Aspiration	Not classified as causing aspiration.

# **12. ECOLOGICAL INFORMATION**

#### 12.1 Toxicity

Lead is potentially toxic to all aquatic organisms, with organic lead compounds tending to be more toxic than inorganic lead compounds. Lead becomes more toxic to fish as dissolved oxygen levels decrease. Toxicity to aquatic organisms increases in acidic or soft water.

#### 12.2 Persistence and degradability

Inorganic lead does not degrade.

#### 12.3 Bioaccumulative potential

Lead bioconcentrates and bioaccumulates in both aquatic and terrestrial organisms.

#### 12.4 Mobility in soil

Lead is sparingly soluble and is expected to be adsorbed onto soils and sediments. Mobility is expected to be low.

#### 12.5 Other adverse effects

No information provided.

# 13. DISPOSAL CONSIDERATIONS

#### 13.1 Waste treatment methods

**Waste disposal** This product is recyclable. Please return to manufacturer. Contact the manufacturer/supplier for additional information (if required).

Legislation Dispose of in accordance with relevant local legislation.

# 14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS 5433:2012, UN, IMDG OR IATA





	LAND TRANSPORT (NZS 5433)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)	
14.1 UN Number	2800	2800	2800	
14.2 Proper Shipping Name	BATTERIES, WET, NON-SPILLABLE, electric storage	BATTERIES, WET, NON-SPILLABLE, electric storage	BATTERIES, WET, NON-SPILLABLE, electric storage	
14.3 Transport hazard class	8	8	8	
14.4 Packing Group	None allocated.	None allocated.	None allocated.	

#### 14.5 Environmental hazards

Not a Marine Pollutant.

#### 14.6 Special precautions for user

Hazchem code	2R
EmS	F-A, S-B
Other information	These batteries are non-spillable and meet the requirements of IATA Special Provision A67, IMDG 238.1 and 238.2, ADG 238 and NZS 5433 DG Special Provision 238 provided, when packaged for transport, the terminals are protected from short circuit. This means, for example, exemption from road transport placarding requirements.

# 15. REGULATORY INFORMATION

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

 

 Approval code
 MANUFACTURED ARTICLE

 Group standard
 Something for which its intended use is primarily to do with its physical shape, rather than its chemical composition.

 Inventory listings
 AUSTRALIA: AllC (Australian Inventory of Industrial Chemicals) All components are listed on AllC, or are exempt. NEW ZEALAND: NZIOC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt.

# **16. OTHER INFORMATION**

Additional information RESPIRATORS: In general the use of respirators should be limited and engineering controls employed to avoid exposure. If respiratory equipment must be worn ensure correct respirator selection and training is undertaken. Remember that some respirators may be extremely uncomfortable when used for long periods. The use of air powered or air supplied respirators should be considered where prolonged or repeated use is necessary.

ACIDS: When mixing acids with water (diluting), caution must be taken as heat will be generated which causes violent spattering. Always add a small volume of acid to a large volume of water, NEVER the reverse.

#### PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

#### HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.



Abbreviations	ACGIH CAS # CCID CNS EC No. EMS EPA GHS HSNO IARC LC50 LD50 mg/m <sup>3</sup> OEL pH pm STEL STOT-RE STOT-RE STOT-SE TLV TWA	American Conference of Governmental Industrial Hygienists Chemical Abstract Service number - used to uniquely identify chemical compounds Chemical Classification and Information Database (HSNO) Central Nervous System EC No - European Community Number Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods) Environmental Protection Authority [New Zealand] Globally Harmonized System Hazardous Substances and New Organisms International Agency for Research on Cancer Lethal Concentration, 50% / Median Lethal Concentration Lethal Dose, 50% / Median Lethal Dose Milligrams per Cubic Metre Occupational Exposure Limit relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline). Parts Per Million Short-Term Exposure Limit Specific target organ toxicity (repeated exposure) Specific target organ toxicity (single exposure) Threshold Limit Value Time Weighted Average			
Report status	This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier. While RMT has taken all due care to include accurate and up-to-date information in this SDS, it does				
	not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.				
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		[ End of SDS ]			

