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

1.1. Product identifier

Trade name : AGM Automotive Battery

Classification : Battery wet, filled with acid, electric storage

Part Numbers

24AGM, 24R-7AGMA, 24RAGM, 31AHDAGM, 31TAGM, 47AGM, 48-7AGMA, 48AGM, 49-AGMA , 49AGM, 94R-8AGMA, 94RAGM, C318STAGMA, M24-6AGM, M24AGMA, P24AGM, P24RAGM, P31TAGM, P48AGM, P49AGM, P94RAGM, P94RAGM-8A, PS46B24RAGM, S46B24R, S46B24RA, 20LBS-AGM

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Battery to produce a voltage

1.3. Details of the supplier of the safety data sheet

Factory Motor Parts
1380 Corporate Center Curve, Suite 200
Eagan, MN 55121
1-866-387-3343

1.4. Emergency telephone number

Emergency number : 82-42-620-4332

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Substances and mixtures, which in contact with water, emit flammable gases, categories 2
Acute toxicity (oral, dermal, inhalation) categories 1
Skin corrosion categories 1
Serious eye damage category 1
Carcinogenicity categories 1A
Germ cell mutagenicity categories categories 2
Reproductive toxicity categories 1A
Specific Target Organ Toxicity - Single exposure categories 1
Specific Target Organ Toxicity - Repeated exposure categories 1

2.2. Label elements

GHS-US labeling

1) Pictogram

2) GHS Signal word : Danger

3) GHS Hazard statements

H261 In contact with water releases flammable gas
H314 Cause severe skin burns and eye damage
H318 Causes serious eye damage
H330 Fatal if inhaled
H341 Suspected of causing genetic defects
H350 May cause cancer
H360 May damage fertility or the unborn child
H370 Causes damage to organs
H372 Causes damage to organs through prolonged or repeated exposure

4) GHS Precautionary statements

P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P223 Do not allow contact with water
P231 + P232 Handle under inert gas. Protect from moisture.

P260 Do not breathe dust/fume/gas/mist/vapours/spray
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
P280 Wear protective gloves/protective clothing/eye protection/face protection
P281 Wear protective gloves/protective clothing/eye protection/face protection
P284 [In case of inadequate ventilation] wear respiratory protection

5) GHS First aid measure
P301 + P330 + P331 If SWALLOWED : Rinse mouth. Do NOT induce vomiting
P303 + P361 + P353 If ON SKIN (or hair) : Take off immediately all contaminated clothing. Rinse skin with water/shower
P304 + P340 IF INHALED : 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.
P307 + P311 Immediately call a POISON CENTER/doctor/….
P308 + P313 IF exposed or concerned : Get medical advice/attention.
P310 Immediately call a POISON CENTER/doctor/
P314 Get medical advice/attention if you feel unwell.
P320 Specific treatment is urgent (see … on this label).
P321 Specific treatment (see … on this label).
P335 + P334 Brush off loose particles from skin. Immerse in cool water/wrap in wet bandages.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire : Use … to extinguish.
6) GHS Storage
P402 + P404 Store in a dry place. Store in a closed container.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
7) GHS Disposal
P501 Dispose of contents/container to … in accordance with local/regional/national/international regulations (to be specified).

2.3. Other hazards (which do not result in classification (NFPA)

ANTIMONY	
Health	2
Flammability	0
Reactivity	0
ARSENIC	
Health	1
Flammability	0
Reactivity	0
CALCIUM	
Health	3
Flammability	1
Reactivity	2
SULFURIC ACID	
Health	3
Flammability	0
Reactivity	2
LEAD	
Health	1
Flammability	0
Reactivity	0
TIN	
Health	1
Flammability	3
Reactivity	0
SILICA, AMORPHOUS FUSED	
Health	1
Flammability	0

Reactivity	0
POLYPROPYLENE	
Health	1
Flammability	1
Reactivity	0

SECTION 3: Composition/information on ingredients

3.1. Substance

Hazardous Components Specific Chemical Identity (Common Name(s))	OSHA PEL	ACGIH TLV	Range Percent By Weight	Average	*SVHC? (REACH)
Lead, CAS #7439921	0.05 mg/m^3	0.05 mg/m^3	61-71	66	No
Sulfuric Acid, CAS #7664939	1.00 mg/m^3	1.00 mg/m^3	16-26	21	No
Fiberglass Separator,-	N/A	N/A	3-5	4	No
Tin, CAS #7440315	2.00 mg/m^3	2.00 mg/m^3	<2	<2	No
Polypropylene, CAS #9003070	-	-	5-8	6	No
Calcium, CAS #7440702	1.0mg/m^3	1.0 mg/m^3	<1	<1	No

* SVHC : Substances of Very High Concern (REACH Regulation in EU)

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Contact with internal components if battery is opened, broken or spilled.

First-aid measures after inhalation : Remove to fresh air and provide medical oxygen/CPR if needed. Obtain medical attention.

First-aid measures after skin contact : Flush contacted area with large amounts of water for at least 15 minutes. Remove contaminated clothing and obtain

First-aid measures after eye contact : Immediately flush with water for at least 15 minutes, hold eyelids open. obtain medical attention. :

First-aid measures after ingestion Do not induce vomiting. If conscious drink large amounts of water/milk. Obtain medical attention. Never give anything

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Class ABC, CO2 Halon Auto-Ignition Temperature : Polypropylene 675□

5.2. Special hazards arising from the substance or mixture

Hydrogen gas and sulfuric acid vapors are generated upon overcharge and polypropylene case failure. Ventilate charging areas as per ACGIH Industrial Ventilation : A Manual of Recommended Practice and National Fire Code, 1980 Vol.1, P.12, B-9, 10. Hydrogen gas may be flammable or explosive when mixed with air, oxygen, chlorine. Avoid open flames/ sparks/other sources of ignition near battery. To avoid risk of fire or explosion, keep sparks or other sources of ignition away from batteries and do not allow metallic materials to simultaneously contact negative and positive terminals of cells and batteries. SULFURIC ACID REACTS VIOLENTLY WITH WATER/ORGANICS.

5.3. Advice for firefighters

Firefighting instructions : Lead-acid batteries do not burn or burn with difficulty. Do not use water on fires where molten metal is present. Extinguish fire with agent suitable for surrounding combustible materials. Cool exterior of battery if exposed to fire to prevent rupture. The acid mist and vapors generated by heat or fire are corrosive. Use NIOSH approved self-contained breathing apparatus (SCBA) and full protective equipment ioerated in positive-pressure mode.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Acid resistant aprons, boots and protective clothing. ANSI approved safety glasses with side shields/face shield recommended. Ventilate enclosed areas.

6.2. Environmental precautions

Lead and its compounds and sulfuric acid can pose a severe threat to the environment. Contamination of water, soil, and air should be prevented.

6.3. Methods and material for containment and cleaning up

Stop release, if possible. Avoid contact with any spilled material. Contain spill, isolate hazard area, and deny entry. Limit site access to emergency responders. Neutralize with sodium bicarbonate, soda ash, lime or other neutralizing agent. Place battery in suitable container for disposal. Dispose of contaminated material in accordance with applicable local, state and federal regulations. Sodium bicarbonate, soda ash, sand, lime or other neutralizing agent should be kept on-site for spill remediation.

SECTION 7: Handling and storage

7.1. Precautions for safe handling and storage

Keep away from flames during and immediately after charging. Combustion or overcharging may create or liberate toxic and hazardous gases and liquids including hydrogen, sulfuric acid mist, sulfur dioxide, sulfur trioxide, stibine, arsine and sulfuric acid. Store batteries in cool, dry, well ventilated area. Do not short circuit battery terminals, or remove vent caps during storage or recharging. Protect battery from physical damage.

7.2. Other Precautions

GOOD PERSONAL HYGIENE AND WORK PRACTICES ARE MANDATORY. Refrain from eating, drinking or smoking in work areas. Thoroughly wash hands, face, neck, and arms before eating, drinking or smoking. Launder soiled clothing before reuse. Emptied batteries contain hazardous sulfuric acid residue.

SECTION 8: Exposure controls/personal protection

Respiratory Protection (Specify Type) : Acid/gas NIOSH approved respirator is required when the PEL is exceeded or employee experiences respiratory irritation. When exposure levels are unknown or when firefighting, wear a self-contained breathing apparatus with a full face piece operated in a positive pressure mode.

Ventilation : Must be provided when charging in an enclosed area. Change air every 15min.

Local Exhaust : When PEL is exceeded.

Mechanical (General) : Normal mechanical ventilation recommended for stationary applications.

Protective Gloves : Wear rubber or plastic acid resistant gloves with elbow length gauntlet when filling batteries.

Eye Protection : ANSI approved safety glasses with side shields/face shield recommended safety goggles.

Other Protective Clothing or Equipment : Ventilation as described in the Industrial Ventilation Manual produced by the American Conference of Governmental Industrial Hygienists, shall be provided in areas where exposures are above the PEL or TLV specified by OSHA or other local, state and federal regulations. Acid-resistant rubber or plastic apron, boots and protective clothing. Safety shower and eyewash.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Boiling Point	:	Electrolyte Approx. 235
Specific Gravity	:	Electrolyte 1.250-1.320 pH<2
Percent Volatile by Volume	:	Not Applicable
Evaporation Rate	:	Note Applicable
Reactivity in Water	:	Electrolyte - water reactive(1)
Appearance and Odor	:	Battery : Polypropylene or hard rubber case, solid.
		Lead : Gray, metallic, solid
		Electrolyte : Liquid, colorless, oily fluid; nuisance odor when got or charging battery. :
Vapor Pressure		Electrolyte 1mm Hg @ 145.8
Melting Point	:	Polypropylene <320
Vepar Density	:	Hydrogen(Air=1) - 0.069
		Electrolyte(Air=1) - 3.4 At STP
Solubility in Water	:	Electrolyte - 100% Soluble

SECTION 10: Stability and reactivity

10.1. Chemical stability

Stable

10.2. Possibility of hazardous reactions

Stable

10.3. Conditions to avoid

High temperatures - cases decompose at < 320 □
Avoid overcharging and smoking, or sparks near battery surface and rapid overcharge

10.4. Incompatible materials

Spark, Open flames, Keep battery case away from strong oxidizers.

10.5. Hazardous decomposition products

An explosive hydrogen/oxygen mixture within the battery may occur during charging. Combustion

can produce carbon dioxide (CO_2) and carbon monoxide (CO). Molten metals produce fumes and/or vapor that may be toxic respiratory irritants.
or

10.6. Hazardous Polymerization

Will Not Occur (Do not overcharge)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on the likely routes of exposure: The primary routes of exposure to lead are ingestion or inhalation of dust and fumes.
ACUTE :
INGESTION/INHALATION : Exposure to lead and its compounds may cause headache, nausea, vomiting, abdominal spasms, fatigue, sleep disturbances, weight loss, anemia, and pain in the legs, arms and joints. Kidney damage, as well as anemia, can occur from acute exposure.
CHRONIC :
INHALATION/INGESTION : Prolonged exposure to lead and its compounds may produce many of the symptoms of short-term exposure and may also cause central nervous system damage, gastrointestinal disturbances, anemia, and wrist drop. Symptoms of central nervous system

SECTION 12: Ecological information

12.1. Aquatic and terrestrial ecotoxicity

In most surface water and groundwater, lead forms compounds with anions such as hydroxides, carbonates, sulfates, and phosphates and precipitates out of the water column.

12.2. Persistence and degradability

Lead may occur as sorbed ions or surface coatings on sediment mineral particles or may be carried in colloidal particles in surface water.

12.3. Bioaccumulative potential

Lead (when in the dissolved phase) is bioaccumulated by plants and animals, both aquatic and terrestrial.

12.4. Mobility in soil

Most lead is strongly retained in soil, resulting in little mobility. Lead may be immobilized by ion exchange with hydrous oxides or clays or by chelation with humic or fulvic acids in the soil

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Lead-acid batteries are completely recyclable. Return whole scrap batteries to distributor, manufacturer or lead smelter for recycling. For information on returning batteries to ATLASBX Battery Company for recycling call 82-42-620-4332. For neutralized spills, place residue in acid-resistant containers with sorbent material, sand or earth and dispose of in accordance with local, state and federal regulations for acid and lead compounds. Contact local and/or state environmental officials regarding disposal information.

SECTION 14: Transport information

U.S. DOT PROPER SHIPPING NAME : Batteries, wet filled with acid
U.S. DOT HAZARD CLASS : 8
U.S. DOT ID NUMBER : UN2800
U.S. DOT PACKING GROUP : III
U.S. DOT LABEL : Corrosive

IMO PROPER SHIPPING NAME : Batteries, wet, Nonspillable
IMO REGULATION PAGE NUMBER : 8120
IMO U.N.CLASS : 8
IMO U.N.NUMBER : UN2800
IMO PACKING GROUP : III
IMO LABEL : Corrosive
IMO VESSEL STOWAGE : A

IATA PROPER SHIPPING NAME : Batteries, wet, Nonspillable
IATA U.N.CLASS : 8
IATA U.N.NUMBER : UN 2800
IATA PACKING GROUP : III
IATA LABEL : Corrosive

SECTION 15: Regulatory information

U.S Hazardous Under Hazard Communication Standard : Lead : Yes

Sulfuric Acid : Yes
Antimony : Yes
Arsenic : Yes

Ingredients Listed on TSCA Inventory : Yes

CERCLA Section 304 Hazardous Substances : Lead : Yes RQ : NA*

Sulfuric Acid : Yes RQ : 1000 pounds

Antimony : Yes RQ : 5000 pounds

Arsenic : Yes RQ : 1 pound

*Reporting not required when diameter of the pieces of solid metal released is equal to or exceeds 100 micrometers.

EPCRA Section 302 Extremely Hazardous Substance : Sulfuric acid : Yes

EPCRA Section 313 Toxic Release Inventory : Lead : CAS No 7439-92-1

Sulfuric Acid : CAS No 7664-93-9
Antimony : CAS NO 7440-36-0
Arsenic : CAS NO 7440-38-2

SECTION 16: Other information

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