Product ID:LEAD-ACID BATTERY MSDS Date:03/15/1995 FSC:6140 NIIN:00-195-1315 **MSDS Number: BYBYD** === Responsible Party === Company Name: ADVANTAGE BATTERY CORP Address:3701 BEDFORD-EULESS RD SUITE 501 City:HURST State:TX ZIP:76053 Country:US Info Phone Num:817-589-1225 Emergency Phone Num:817-589-1225,800-424-9300(CHEMTREC) CAGE:0VW59 === Contractor Identification = ___ Company Name: GES AMERICA (FORMERLY) ADVANTAGE BATTERY CORP Address:7001 GRAPEVINE HIGHWAY 500 Box:City:NORTH RICHLAND HILLS State:TX ZIP:76180 Country:US Phone:817-589-1225 CAGE:0VW59 Ingred Name: INORGANIC LEAD (SARA 313) (CERCLA) CAS:7439-92-1 RTECS #: OF7525000 Fraction by Wt: 68-80%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:SEE 1910.1025 ACGIH TLV:0.15MG/M3 DUST; 9495

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:ANTIM

ONY (SARA 313) (CERCLA) CAS:7440-36-0 RTECS #:CC4025000 Fraction by Wt: 1.5% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.5 MG/M3 ACGIH TLV:0.5 MG (SB)/M3; 9495 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:ARSENIC (SARA 313) (CERCLA) CAS:7440-38-2 RTECS #:CG0525000 Fraction by Wt: 0.2% Other REC Limits:NONE RECOMMENDED OSHA PEL:SEE 1910.1018 ACGIH TLV:0.01 MG/M3, A1; 9495 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:CALCIUM, METAL CAS:7440-70-2 RTECS #:EV8040000 Fraction by Wt: 0.2% Other REC Limits:NONE RECOMMENDED

Ingred Name:TIN CAS:7440-31-5 RTECS #:XP7320000 Fraction by Wt: 0.2% Other REC Limits:NONE RECOMMENDED OSHA PEL:2 MG/M3 ACGIH TLV:2 MG/M3; 9495

Ingred Name:SULFURIC ACID (ELECTROLYTE) (SARA 302/313) (CERCLA) CAS:7664-93-9 RTECS #:WS5600000 Fraction by Wt: 11-23% Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:1 MG/M3/3 STEL; 9495 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

Ingred Name:POLYPROPYLENE (CASE MATERIAL) CAS:9003-07-0 RTECS #:TR5000000 Fr action by Wt: 5-6% Other REC Limits:NONE RECOMMENDED

Ingred Name:POLYETHYLENE (SEPARATOR MATERIAL) CAS:9002-88-4 RTECS #:TQ3325000 Fraction by Wt: 1-2% Other REC Limits:NONE RECOMMENDED

LD50 LC50 Mixture: NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO Health Hazards Acute and Chronic: HANDLING AND MAINTENANCE OF BATTERY MAY RES ULT IN EXPOSURE TO SULFURIC ACID. EXPOSURE TO LEAD COMPONENTS SHOULD NOT OCCUR UNDER NORMAL CONDITIONS OF USE. ELECTROLYTE HARMFUL BY ALL ROUTES OF ENTRY. EY ES: BURNS, CORNEA DAMAGE, BLINDNESS. SKIN: BURNS, ULCERATION. INHALATION: SEVERE IRRITATION.INGESTION:SEVERE IRRITATION. Explanation of Carcinogenicity: LEAD IS LISTED BY IARC 2B, POSSIBLY CARCINOGENIC TO HUMANS. Effects of Overexposure: ELECTROLYTE: EYES: SEVERE IRRITATION, BURNS, CORNEA DAMAGE, BLINDNESS. SKIN: SEVER E IRRITATION, BURNS, ULCERATION. INHALATION: MISTS/VAPORS MAY CAUSE SEVERE RESPIRATORY IRRITATION. INGESTION: IRRITATI ON OF MOUTH, THROAT, ESOPHAGUS. INORGANIC LEAD: HEADACHE, FATIGUE, ABDOMINAL PAIN, LOSS OF APPETITE, MUSCULAR ACHES/WEAKNESS. Medical Cond Aggravated by Exposure:SULFURIC ACID MIST MAY AGGRAVATE PULMONARY CONDITIONS. CONTACT WITH SKIN MAY AGGRAVATE ECZEMA AND OTHER SKIN DISEASES. INORGANIC LEAD EXPOSURE MAY AGGRAVATE KIDNEY,

LIVER, AND NEUROLOGIC DISEASES.

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET PROMPT MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH AREA WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. RESTORE BREATHING AS NECESSARY. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GET IMMEDIATE MEDICAL ATTENTION.

Extingu

ishing Media:CARBON DIOXIDE, DRY CHEMICALS, FOAM. Fire Fighting Procedures:WEAR ACID-RESISTANT CLOTHING. CONTACT OF WATER WITH SULFURIC ACID MAY GENERATE HEAT. USE POSITIVE-PRESSURE, SCBA. SHUT OFF POWER.

Unusual Fire/Explosion Hazard: KEEP SPARKS, FLAMES AND OTHER IGNITION SOURCES AWAY FROM BATTERIES. EXPLOSION MAY RESULT FROM IMPROPER CHARGING AND IGNITION OF FLAMMABLE HYDROGEN GAS.

Spill Release Procedures: IF

BATTERY BREAKS OR LEAKS ISOLATE AREA.

NEUTRALIZE SMALL SPILLS OR LEAKS WITH BAKING SODA, SODA ASH, LIME. FOR LARGE SPILLS, STOP FLOW AND ABSORB WITH DRY SAND, SOIL, OR NON-COMBUSTIBLE ABSORBENT.PRE VENT ACID DISCHARGE INTO SANITARY OR STORM SEWERS.

Neutralizing Agent: USE SODA ASH, BAKING SODA, OR LIME TO NEUTRALIZE THE ACID ELECTROLYTE.

Handling and Storage Precautions:STORE BATTERIES ON IMPERVIOUS SURFACE S

IN COOL, DRY AREA WITH ADEQUATE VENTILATION AND CONTAINMENT IN EVENT OF SPILLS. PROTECT FROM WEATHER CONDITIONS.

Other Precautions: KEEP AWAY FROM FIRE, SPARKS, HEAT. HANDLE BATTERIES TO AVOID CONTAINER DAMAGE OR TURNOVER.

Respiratory Protection:NONE REQUIRED UNDER NORMAL CONDITIONS OF USE. HOWEVER, IF SULFURIC ACID MIST CONCENTRATION EXCEEDS PEL, USE NIOSH OR MSHA-APPROVED RESPIRATORS.

Ventilation:BATTERIE

S SHOULD BE STORED/HANDLED IN WELL-VENTILATED

AREAS.MECHANICAL VENTILATION, WHEN USED, SHOULD BE ACID-RESISTANT. Protective Gloves:WEAR ACID-RESISTANT GLOVES.

Eye Protection: USE CHEMICAL GOGGLES OR FACE SHIELD.

Other Protective Equipment: PROVIDE EYE WASH STATION AND SAFETY SHOWER IN AREAS WHERE SULFURIC ACID IS HANDLED IN CONCENTRATIONS >1%.

Work Hygienic Practices: WASH AFTER HANDLING AND BEFORE EATING,

DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. Supplemental Sa

fety and Health

SULFURIC ACID REACTS VIOLENTLY WITH STRONG REDUCING AGENTS, METALS, STRONG OXIDIZERS, AND WATER. CONTACT WITH METALS MAY GENERATE SULFUR DIOXIDE FUMES AND HDROGEN GAS. CONTACT WITH COMBUSTIBLE AND ORG ANIC MATERIAL MAY CAUSE FIRE AND EXPLOSION.

HCC:C1 Boiling Pt:B.P. Text:230F,110C Vapor Pres:10 Vapor Density:>1 Spec Gravity:1.240 TO 1.280 Evaporation Rate & amp; Reference: