

GNB INC INDUSTRIAL BATTERY DIV WOODLAKE CORP PARK -- MSB SEALED LEAD ACID BATTERY  
-- 6140-01-314-3790

===== Product Identification =====

Product ID:MSB SEALED LEAD ACID BATTERY

MSDS Date:02/25/1997

FSC:6140

NIIN:01-314-3790

Status Code:A

MSDS Number: CKGXX

=== Responsible Party ===

Company Name:GNB INC INDUSTRIAL BATTERY DIV WOODLAKE CORP PARK

Address:829 PARKVIEW BOULEVARD

City:LOMBARD

State:IL

ZIP:60148-3249

Country:US

Info Phone Num:630-629-5200

Emergency Phone Num:630-629-5200

Preparer's Name:STEVE EMMONS

CAGE:88219

=== Contractor Identification ===

Company Name:BATTERY OUTLET OF HAMPTON INC

Address:2815 GEORGE WASHINGTON HWY

Box:City:TABB

State:VA

ZIP:23602

Country:US

Phone:804-867-8280

CAGE:0FTM0

Company Name:EXIDE TECHNOLOGIES INC CO, GNB INDUSTRIAL POWER DIV

Address:829 PARKVIEW BOULEVARD

Box:City:LOMBARD

State:IL

ZIP:60148-3249

Country:US

Phone:800-872-0471/630-691-7841

CAGE:88

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Composition/Information on Ingredients  
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Ingred Name:LEAD (SARA III)  
CAS:7439-92-1  
RTECS #:OF7525000  
Minumum % Wt:60.  
Maxumum % Wt:70.  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.05 MG/M3;1910.1025  
ACGIH TLV:0.15 MG/M3;DUST 9293  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID (SARA III)  
CAS:7664-93-9  
RTECS #:WS5600000  
Minumum % Wt:20.  
Maxumum % Wt:21.  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9293  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:POLYPROPYLENE (CASE MATERIAL)  
CAS:9003-07-4  
RTECS #:UD1842000  
Minumum % Wt:4.  
Maxumum % Wt:5.  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CALCINATED CLAY (CASE MATERIAL)  
&lt; Wt:1.2  
Other REC Limits:NONE RECOMMENDED

Ingred Name:ANTIMONY (SARA III) (CASE MATERIAL)  
CAS:7440-36-0  
RTECS #:CC4025000  
&lt; Wt:.6  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.5 MG/M3  
ACGIH TLV:0.5 MG SB/M3; 9293  
EPA Rpt Qty:5000 LBS  
DOT Rpt Qty:5000 LBS

Ingred Name:GLASS, FIBROUS

(SEPARATOR MATERIAL)

RTECS #:LK3651000

Minumum % Wt:7.

Maxumum % Wt:8.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 (DUST)

ACGIH TLV:10 MG/M3 (DUST);9293

Ingred Name:COPPER (SARA III) (SEPARATOR MATERIAL)

CAS:7440-50-8

RTECS #:GL5325000

&lt; Wt:1.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1MG/M3 FUME/1 DUST

ACGIH TLV:0.2MG/M3 FUME; 9293

EPA Rpt Qty:5000 LBS

DOT Rpt Qty:5000 LBS

Ingred Name:TIN (SEPARATOR MATERIAL)

CAS:7440-31-5

RTECS #:XP7320000

Minumum % Wt:1.

Maxumum % Wt:2.

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her REC Limits:NONE RECOMMENDED

OSHA PEL:2 MG/M3

ACGIH TLV:2 MG/M3; 9293

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===== Hazards Identification =====

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

Reports of Carcinogenicity:NTP:UNKNOWN IARC:YES

Health Hazards Acute and Chronic:INHALATION:SULFURIC ACID VAPORS OR

MIST MAY CAUSE SEVERE RESPIRATORY IRRITATION.LEAD DUST OR FUMES MAY  
CAUSE IRRITATION OF UPPER RESPIRATORY TRACT OR LUNGS.SK

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CONTACT:SULFURIC ACID MAY CAUSE SEVERE IRRITATION, BURNS &

ULCERATION.LEAD COMPOUNDS ARE NOT ABSORBED THROUGH THE SKIN.

SULFURIC ACID VAPORS OR MIST CAN CAUSE SEVERE

IRRITATION,BURNS,CORNEA DAMAGE & BLINDNESS.LEAD COMPOUNDS MAY CAUSE

EYE IRRITATION.INGESTION:SULFURIC ACID MAY CAUSE SEVERE IRRITATION

OF MOUTH, THROAT, ESOPHAGUS & STOMACH.LEAD COMPOUNDS MAY CAUSE

ABDOMINAL PAIN, NAUSEA,VOMITING,DIARRHEA & SEVERE CRAMPING.ACUTE

INGESTION SHOULD BE TREATED BY A

PHYSICIAN

Explanation of Carcinogenicity:LEAD HAS BEEN TESTED FOR THE ABILITY TO CAUSE CANCER. THE RESULTS SHOWED THAT THERE IS INSUFFICIENT EVIDENCE TO SHOW THAT LEAD CAN OR CANNOT CAUSE CANCER. IARC HAS CLASSIFIED "STRONG INORGANIC ACID MI ST CONTAINING SULFURIC ACID" AS A CLASS 1 CARCINOGEN. THIS CLASSIFICATION DOES NOT APPLY TO LIQUID FORM OF ACID FOUND IN BATTERIES.

Effects of Overexposure:ACUTE: SULFURIC ACID MAY CAUSE SEVERE SKIN IRRITATION, BURNS, DAMAGE TO CORNEA AND POSSIBLE BLINDNESS AND UPPER RESPIRATORY IRRITATION. LEAD COMPOUNDS MAY CAUSE ABDOMINAL PAIN, NAUSEA, HEADACHES, VOMI TING, DIAHHREA, SEVERE CRAMPING AND DIFFICULTY IN SLEEPING. CHRONIC EFFECTS: SULFURIC ACID MAY LEAD TO SCARRING OF THE CORNEA, INFLAMMATION OF THE NOSE, THROAT AND BRONCHIAL TUBES AND POSSIBLE EROSION OF TOOTH ENAMEL. LEAD COMPOUNDS MAY CAUSE ENEMIA, DAMAGE TO THE KIDNEYS AND NERVOUS SYTEM. MAY CAUSE REPRODUCTIVE CHANGES IN MALES AND FEMALES.

Med ical Cond Aggravated by Exposure:NO DATA PROVIDED BY RESPONSIBLE PARTY.

===== First Aid Measures =====

First Aid:INHALATION: SULFURIC ACID-REMOVE TO FRESH AIR IMMEDIATELY. IF BREATHING DIFFICULT. LEAD COMPOUNDS-REMOVE FROM EXPOSURE, GARGLE, WASH NOSE AND EYES. CONSULT PHYSICIAN. SKIN: FLUSH WITH WATER FOR AT LEA ST 15 MINUTES, REMOVE ANY CONTAMINATED AND DO NOT WEAR UNTIL CLEANED. IF SHOES CONTAMINATED, REMOVE AND DISCARD IF LEATHER. LE

AD COMPOUNDS ARE NOT ABSORBED THROUGH SKIN. EYES: SULFURIC ACID & LEAD COM POUNDS-FLUSH IMMEDIATELY WITH WATER FOR AT LEAST 15 MINUTES, THEN CONSULT PHYSICIAN. INGESTION: SULFURIC ACID-GIVE LARGE QUANTITIES WATER. DO NOT INDUCE VOMITING! LEAD COMPOUNDS: CONSULT PHYSICIAN.

===== Fire Fighting Measures =====

Lower Limits:4.1 H2 GAS  
Upper Limits:74.1 H2 GAS  
Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, FOAM.  
Fire Fighting Procedures:IF BAT

ATTERY ON CHARGE, TURN OFF POWER. USE

POSITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS. WATER APPLIED TO ELECTROLYTE GENERATE HEAT, SPLATTERING.

Unusual Fire/Explosion Hazard:HYDROGEN AND OXYGEN GASES ARE PRODUCED IN THE CELLS DURING NORMAL BATTERY OPERATION OR WHEN ON CHARGE. THESE GASES ENTER THE AIR THROUGH THE VENT CAPS. TO AVOID RISK OF FIRE OR EXPLOSION KEEP SPARKS 7 IGNITION SOURCES AWAY FROM BATTERY. DO NOT ALLOW METALLIC MATERIAL TO CONTACT BOTH TERMINALS AT SAME TIME.

===== Accidental Release Measures =====

Spill Release Procedures:REMOVE COMBUSTIBLE MATERIALS & ALL SOURCES OF IGNITION. STOP FLOW OF MATERIAL & CONTAIN SPILL BY DIKING WITH SODA ASH (SODIUM CARBONATE) OR QUICK LIME (CALCIUM OXIDE). CAREFULLY NEUTRALIZE SPILL. MAKE CERTAIN MIXTURE IS NEUTRAL THEN COLLECT RESIDUE & PLACE IN A DRUM, MARKING IAW REGULATIONS. DISPOSE OF AS A HAZARDOUS WASTE. WEAR PROPER PROTECTIVE CLOTHING & EQUIPMENT.

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Neutralizing Agent:BAKING SODA, SODA ASH, CAUSTIC SODA OR EQUIVALENT.

===== Handling and Storage =====

Handling and Storage Precautions:MAKE CERTAIN VENT CAPS ARE ON TIGHTLY. PLACE A MINIMUM OF TWO LAYERS OF CARDBOARD BETWEEN LAYERS OF BATTERIES. DO NOT STACK MORE THAN THREE LAYERS. STORE AND HANDLE LEAD ACID BATTERIES IN WELL VENTILATED AREAS.

Other Precautions:DO NOT ALLOW METALLIC MATERIALS TO SIMULTANEOUSLY CONTACT BOTH THE POSITIVE AND NEGATIVE TERMINALS OF THE BATTERIES.

USE A BATTERY CARRIER TO LIFT A BATTERY OR PLACE HANDS AT OPPOSITE CORNERS TO AVOID SPILLING ACID THROUGH THE VENT.

===== Exposure Controls/Personal Protection =====

Respiratory Protection:NONE NORMALLY REQUIRED UNDER NORMAL CONDITIONS.IF CONCENTRATIONS OF SULFURIC ACID MIST ARE KNOWN TO EXCEED PEL, USE NIOSH OR MSHA APPROVED RESPIRATORY PROTECTION.

Ventilation:STORE AND HANDLE LEAD ACID BATTERIES IN WELL VENTILATED AREA

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Protective Gloves:NONE NORMALLY. RUBBER OR PLASTIC ACID RESISTANT WITH ELBOW LENGTH GAUNTLET.

Eye Protection:GOGGLES OR FACE SHIELD.

Other Protective Equipment:NONE NORMALLY REQUIRED. RUBBER APRON. UNDER SEVERE EXPOSURE OR EMERGENCY CONDITIONS, WEAR ACID RESISTANT CLOTHING AND BOOTS.

Work Hygienic Practices:WASH HANDS THOROUGHLY BEFORE EATING, DRINKING, OR SMOKING AFTER HANDLING BATTERIES.

Supplemental Safety and Health

PROTECTIVE MEASURES TO TAKE DURING NON-ROUTINE TASKS INCLUDING

EQUIPMENT MAINTENANCE: NOT APPLICABLE. NOTE FROM DLA-HMIS: PHYSICAL/CHEMICAL PROPERTIES STATED ARE FOR ELECTROLYTE.

===== Physical/Chemical Properties =====

HCC:Z4

Boiling Pt.=95.C, 203.F

Evaporation Rate & Reference: