

JOHNSON CONTROLS INC GLOBE BATTERY DIV -- LEAD ACID BATTERY -- 6140-01-360-6489  
===== Product Identification =====

Product ID:LEAD ACID BATTERY

MSDS Date:11/15/1985

FSC:6140

NIIN:01-360-6489

MSDS Number: BQFGP

=== Responsible Party ===

Company Name:JOHNSON CONTROLS INC GLOBE BATTERY DIV

Address:5757 N GREEN BAY AVE

Box:591

City:MILWAUKEE

State:WI

ZIP:53201

Country:US

Info Phone Num:414-228-2746/31

39/FAX 414-961-6506

Emergency Phone Num:414-228-1200

Preparer's Name:ALBERTA L SCHUMACHER

Chemtrec Ind/Phone:(800)424-9300

CAGE:25244

=== Contractor Identification ===

Company Name:BATTERY OUTLET INC

Address:1608 CAMPOSTELLA RD

Box:City:CHESAPEAKE

State:VA

ZIP:23324

Country:US

Phone:757-545-4442

CAGE:0FGN2

Company Name:JOHNSON CONTROLS INC GLOBE BATTERY DIV

Address:5757 N GREEN BAY AVE

Box:591

City:MILWAUKEE

State:WI

ZIP:53201

Country:US

Phone:800-365-7777

CAGE:25244

===== Composition/

Information on Ingredients =====

Ingred Name:LEAD (SARA III)/GRID/SPONGE LEAD  
CAS:7439-92-1  
RTECS #:OF7525000  
Other REC Limits:100 UG/M3 (NIOSH)  
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:LEAD PEROXIDE/LEAD DIOXIDE  
CAS:1309-60-0  
RTECS #:OG0700000  
Other REC Limits:100 UG/M3 (OSHA)  
OSHA PEL:0.05 MG/M3 AS PB  
ACGIH TLV:0.15 MG/M3 AS PB

Ingred Name:LEAD SULFATE (SARA III)  
CAS:7446-14-2  
RTECS #:OG4375000  
Other REC Limits:100  
UG/M3 (NIOSH)  
OSHA PEL:SEE 1910.1025  
ACGIH TLV:0.15 MG PB/M3; 9293  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LBS

Ingred Name:SULFURIC ACID (SARA III)/BATTERY ACID (35%)  
CAS:7664-93-9  
RTECS #:WS5600000  
Other REC Limits:1 MG/M3 (NIOSH)  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3; 9293  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:TLV FOR SULFURIC ACID IS 1 MG/M3.  
Routes of Entry: Inhalation:NO Skin:YES Ingestion:YES  
Reports

of Carcinogenicity:NTP:UNKNOWN IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:ACUTE-LEAD MAY CAUSE GI UPSET,LOSS OF APPETITE,DIARRHEA,CONSTIPATION,CRAMPING,LACK OF SLEEP & FATIGUE.CONTACT WITH SULFURIC ACID MAY LEAD TO EYE,SKIN & RESPIRATORY TRACT IRRITATION,CORNEAL & LUNG DAMAGE.CHRONIC-LEAD MAY CAUSE ANEMIA,KIDNEY& NERVOUS SYSTEM DAMAGE.ACID CAN CAUSE BRONCHITIS,EROSION OF TOOTH ENAMEL.

Explanation of Carcinogenicity:LEAD IS POSSIBLY CARCINOGENIC TO HUMAN (MSDS

).  
Effects of Overexposure:LEAD MAY CAUSE GI UPSET, LOSS OF APPETITE, DIARRHEA, CONSTIPATION, CRAMPING, LACK OF SLEEP & FATIGUE. CONTACT WITH SULFURIC ACID MAY LEAD TO EYE, SKIN & RESPIRATORY TRACT IRRITATION, CORNEAL & LUNG DAMAGE.

Medical Cond Aggravated by Exposure:INORGANIC LEAD AND ITS COMPOUNDS CAN AGGRAVATE CHRONIC FORMS OF KIDNEY, LIVER AND NEUROLOGIC DISEASES. CONTACT OF SULFURIC ACID WITH THE SKIN MAY AGGRAVATE SKIN DISEASES SUCH AS ECZEMA AND DERMATITIS.

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

First Aid:OBTAIN MEDICAL ATTENTION IN ALL CASES OF EXPOSURE.EYES/SKIN:FLUSH WITH WATER FOR 15 MINUTES.KEEP EYELIDS OPEN.INHALATION:MOVE TO FRESH AIR.INGESTION:DO NOT INDUCE VOMITING.CALL PHYSICIAN IMMEDIATELY.

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

Flash Point:NON-FLAMMABLE  
Extinguishing Media:CARBON DIOXIDE, FOAM, OR DRY CHEMICAL. WATER SPRAY MAY BE USED TO COOL FIRE-EXPOSED CONTAINER & DECREASE VAPORS.  
Fire Fighting Procedures:WEAR FULL PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS WITH FULL FACEPIECE OPERATED IN THE POSITIVE PRESSURE MODE.  
Unusual Fire/Explosion Hazard:HYDROGEN AND OXYGEN GASES ARE PRODUCED IN THE CELLS DURING NORMAL BATTERY OPERATION. THEY ENTER THE AIR THROUGH THE VENT CAPS. KEEP AWAY SPARKS/SOURCES OF FIRE.

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

Spill Release Procedures:WEAR PROTECTIVE CLOTHING

PROTECTIVE EQUIPMENTS. REMOVE

COMBUSTIBLES & IGNITION SOURCES (H<sub>2</sub> MAY BE PRESENT). CONTAIN BY DUKING AND COVER SPILL WITH SODA ASH OR QUICKLIME. MIX WELL. CHECK THAT MIXTURE IS NEUTRAL. COLLECT AND PLACE IN A DRUM. DO NOT FLUSH TO SEWER.

Neutralizing Agent:SODA ASH (SODIUM CARBONATE), QUICKLIME (CALCIUM OXIDE)

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

Handling and Storage Precautions:STORAGE-STORE NEAR EYEWASH FOUNTAIN AND SAFETY SHOWER. STORAGE AREA SHOULD BE EQUIPPED WITH A DRAIN WHICH CAPTURES SPILLS OF ACID FOR PROPER DISPOSAL.

Other Precautions:KEEP TERMINALS COVERED IN PLASTIC CASE. AVOID SHORTING BATTERIES. DO NOT CRACK OR OVERCHARGE BATTERIES. KEEP LIGHTED CIGARETTES, SPARKS, AND FLAMES AWAY FROM CHARGING BATTERIES. KEEP OUT OF REACH OF SMALL CHILDREN.

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

Respiratory Protection:NOT REQUIRED UNDER NORMAL USE. USE NIOSH-APPROVED ACID-MIST FILTER RESPIRATOR IF 1 MG/M<sup>3</sup> TWA IS EXCEEDED (ACID).

Ventilation:ADEQUATE GENERAL VENTILATION

Protective Gloves:RUBBER

Eye Protection:SPLASH-PROOF CHEMICAL GOGGLES

Other Protective Equipment:RUBBER APRON AND BOOTS. EYES WASH STATION AND SAFETY SHOWER. USE ACID-PROOF CLOTHING FOR MAJOR SPILLS.

Work Hygienic Practices:REMOVE METALLIC JEWELRY-SHOCK POTENTIAL. WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING AND DRINKING.

Supplemental Safety and Health

BE SURE VENT CAPS ARE ON TIGHTLY. PLACE A MINIMUM OF 2 LAYERS OF

CORRUGATED CARDBOARD BETWEEN LAYERS OF BATTERIES. WHEN STACKING IN TRAILER, STACK NO MORE THAN 3 LAYERS HIGH. USE A BATTERY CARRIER TO LIFT A BATTERY OR PLACE HANDS AT OPPOSITE CORNERS TO AVOID SPILLING ACID THROUGH VENT. AVOID CONTACT WITH INSIDE.

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

HCC:Z4

Appearance and Odor:AN OBJECT WITH TRANSPARENT-OPAQUE CASE AND SEALED COVER, TERMINAL, VENT, ODORLESS

=====  
===== Stabili

Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid: YES

POTASSIUM, CARBIDES, SULFIDES, PEROXIDES, P, S, COMBUSTIBLE MATERIALS, STRONG REDUCING AGENTS, MOST METALS, CARBIDES, CHLORATES

Stability Condition to Avoid: HIGH HEAT, OPEN FLAMES, OVERCHARGING, SMOKING, SPARKS

Hazardous Decomposition Products: OXIDES OF LEAD AND SULFUR, HYDROGEN, SULFUR DIOXIDE AND SULFUR TRIOXIDE

===== Disposal Considerations =====

Waste Disposal Methods: DIS

POSE AS HAZARDOUS WASTE. OBSERVE ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATIONS FOR ACID OR LEAD SCRAP. SEND BATTERIES TO LEAD SMELTER FOR RECLAMATION FOLLOWING APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and

disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.