

JOHNSON CONTROLS INC GLOBE BATTERY DIV -- LEAD/ACID BATTERY -- 6140-01-031-6882  
===== Product Identification =====

Product ID:LEAD/ACID BATTERY  
MSDS Date:09/15/1992  
FSC:6140  
NIIN:01-031-6882  
MSDS Number: BTHJM  
=== 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/FA  
X 414-961-6506  
Emergency Phone Num:414-228-2746/800-424-9300(CHEMTREC)  
Preparer's Name:INDUSTRIAL HYGIENE DEPT.  
CAGE:25244  
=== Contractor Identification ===  
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 313) (CERCLA)  
CAS:7439-92-1  
RTECS #:OF7525000  
Fraction by Wt: 34%  
Other REC Limits:NO

NE SPECIFIED  
OSHA PEL:SEE 1910.1025  
ACGIH TLV:0.15MG/M3 DUST; 9495  
EPA Rpt Qty:1 LB  
DOT Rpt Qty:1 LB

Ingred Name:LEAD OXIDE  
CAS:1309-60-0  
RTECS #:OG0700000  
Fraction by Wt: 31%  
Other REC Limits:NONE SPECIFIED

Ingred Name:LEAD SULFATE (SARA 313) (CERCLA)  
CAS:7446-14-2  
RTECS #:OG4375000  
Fraction by Wt: < 1%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:SEE 1910.1025  
ACGIH TLV:0.15 MG(PB)/M3; 9495  
EPA Rpt Qty:100 LBS  
DOT Rpt Qty:100 LBS

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA)  
CAS:7664-93-9  
R  
TECS #:WS5600000  
Fraction by Wt: 34%  
Other REC Limits:NONE SPECIFIED  
OSHA PEL:1 MG/M3  
ACGIH TLV:1 MG/M3/3 STEL; 9495  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

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===== Hazards Identification =====  
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Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO  
Health Hazards Acute and Chronic:UNDER NORMAL CONDITIONS OF USE, THE  
INTERNAL COMPONENTS WILL NOT PRESENT A HEALTH HAZARD. CONTACT  
W/ACID ELECTROLYT

E OR ITS MIST WILL IRRITATE THE TISSUES CONTACTED.  
CONTACT W/LEAD INTERNALS MAY LEAD TO INGESTION. CHRONIC LEAD EXPOSURE MY CAUSE ANEMIA, DAMAGE TO KIDNEYS OR NERVOUS SYSTEM. MAY SCAR CORNEA OR ERODE TEETH

Explanation of Carcinogenicity:LEAD & SULFURIC ACID ARE LISTED. SEE INDIVIDUAL REPORTS FOR DETAILS.

Effects of Overexposure:G/I UPSET, LOSS OF APPETITE, DIARRHEA, CONSTIPATION W/CRAMPING, DIFFICULTY SLEEPING, FATIGUE. ACUTE IRRITATION OF SKIN CORNEAL DAMAGE, SEVERE IRRITATION OF EYES & RESPIRATORY TRACT.

Medical Cond Aggravated by Exposure:CONTACT W/BATTERY INTERNAL COMPONENTS CAN AGGRAVATE CHRONIC FORMAS OF KIDNEY, LIVER & NEUROLIGIC DISEASES, ECZEMA & CONTACT DERMATITIS.

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

First Aid:INHALATION:REMOVE FROM EXPOSURE. SKIN:WASH THOROUGHLY W/SOAP & WATER. REMOVE & DISCARD CONTAMINATED CLOTHING. EYES:IMMEDIATELY RINSE W/COOL RUNNING WATER FOR 15 MIN. GET MEDICAL ATTENTION AFTER RINSIN G. INGESTION OF LEAD:CONSULT A PHYSICIAN. INGESTION OF ACID:DO NOT INDUCE VOMITING. REFER TO A PHYSICIAN IMMEDIATELY.

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

Flash Point:984F,529C H2  
Lower Limits:4.1, H2  
Upper Limits:74.2, H2  
Extinguishing Media:CARBON DIOXIDE, FOAM, OR DRY CHEMICAL.  
Fire Fighting Procedures:USE POSITIVE PRESSURE SELF CONTAINED BREATHING APPARATUS.  
Unusual Fire/Explosion Hazard:HYDROGEN & OXYGEN GASES ARE PRODUCED IN THE CELLS DURING NORMAL OPERATION. TO AVOID THE CHANCE OF A FIRE OR EXPLOSION, KEEP BATTERY AWAY FROM IGNITION SOURCES.

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

Spill Release Procedures:MFR GAVE NO INFORMATION ON MSDS.  
Neutralizing Agent:MFR GAVE NO INFORMATION ON MSDS.

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

Handling and Storage Precautions:STORE BATTERY W/ADEQUATE VENTILATION. ROOM VENTILATION REQUIRED FOR BATTERIES UTILIZED FOR ST

ANDBY POWER

GENERATION. DO NOT DISCHARGE IN ENCLOSED AREA

Other Precautions:MAKE CERTAIN VENT CAPS ARE ON TIGHTLY. PLACE MINIMUM OF 2 LAYERS OF CARDBOARD BETWEEN LAYERS OF BATTERIES. STACK NOT MORE THAN 3 LAYERS HIGH FOR TRANSPORTATION. USE BATTERY CARRIER TO LIFT. AVOID SPILLING ACID. AVOID CONTACT WITH INTERNALS.

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

Respiratory Protection:NONE REQUIRED UNDER NORMAL HANDLING CONDITIONS.

SPILLAGE OR BATTERY FORMATION

MAY GENERATE AN IRRITATING ACID MIST.

IF IRRITATION OCCURS WEAR A RESPIRATOR SUITABLE FOR PROTECTION AGAINST ACID MIST.

Ventilation:SEE STORAGE FOR VENTILATION.

Protective Gloves:VINYL COATED, PVC, GAUNTLET TYPE GLOVES

Eye Protection:SPLASH GOGGLES AND/OR FACE SHIELD

Other Protective Equipment:ACID-RESISTANT APRONS, BOOTS AND PROTECTIVE CLOTHING. PLACE PANT LEG OVER BOOTS TO KEEP ACID OUT OF BOOTS.

Work Hygienic Practices:MFR:?. HMIS:USE GOOD CHEMICAL HYGIENE PRACTICES. AVOID

ID CONTACT IF AT ALL POSSIBLE. WASH THOROUGHLY AFTER HANDLING.

Supplemental Safety and Health

MSDS RECEIVED FROM THE NAVY (FOCAL POINT N). NSN IDENTIFIED BY FOCAL POINT N. ONE OF THE PAGES MAY HAVE BEEN LOST IN TRANSMITTAL.

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

HCC:C1

NRC/State Lic Num:NONE

Vapor Pres:11.7, ACID

Vapor Density:3.4, ACID

Spec Gravity:1.265, ACID

Evaporation Rate & Reference:NOT DETERMINED

Solubility in Water:ACID IS SOLUBLE

Appearance and

Odor:SOLID,LIQUID. ACID IS CLEAR/CLOUDY. REDISH-BROWN TO GRAY SOLID. BOTH ACID ODOR.

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

POTASSIUM,CARBIDES,SULFIDES,PHOSPHOROUS,SULFUR,COMBUSTIBLES,METALS,ORGANIC MATERIAL,CHLORATES,NITRATES,PICRATES,FULMINANTS

Stability Condition to Avoid:SPARKS AND OTHER SOURCES OF IGNITION

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

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:MFR GAVE NO INFORMATION ON MSDS. HMIS:DISPOSE OF I/A/W FEDERAL, STATE & LOCAL REGULATIONS.

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