

JOHNSON CONTROLS INC GLOBE BATTERY DIV -- ABSORBED ELECTROLYTE BATTERY/DYNASTY
-- 6140-01-111-3882

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

Product ID:ABSORBED ELECTROLYTE BATTERY/DYNASTY
MSDS Date:09/15/1993
FSC:6140
NIIN:01-111-3882
MSDS Number: BSFSD
=== Responsible Party ===
Company Name:JOHNSON CONTROLS INC GLOBE BATTERY DIV
Address:5757 N GREEN BAY AVE
Box:591
City:MILWAUKEE
State:WI
ZIP:53201
Co
untry:US
Info Phone Num:414-228-2746/FAX 414-961-6506
Emergency Phone Num:414-228-2746/800-424-9300(CHEMTREC)
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:NONE

RECOMMENDED
OSHA PEL:SEE 1910.1025
ACGIH TLV:0.05MG/M3, A3; 9596
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 RECOMMENDED

Ingred Name:LEAD SULFATE (SARA 313) (CERCLA)
CAS:7446-14-2
RTECS #:OG4375000
Fraction by Wt: 41%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:SEE 1910.1025
ACGIH TLV:0.15 MG(PB)/M3; 9596
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA) (40%)
CAS:766
4-93-9
RTECS #:WS5600000
Fraction by Wt: 34%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3/3 STEL; 9596
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:UNDER NORMAL CONDITIONS OF USE
INTERNAL COMP WON'T PRESENT HEALT

H HAZ.BATT ELECTRO(ACID)/LEAD EXPO

MAY OCCUR DURING BATT PRODUCT/CNTNR BREAK/UNDER EXTREME HEAT CONDITIONS(FIRE).INHAL:ACID MIST FROM BA TT USAGE MAY CAUSE RESP IRRIT.SKIN:ACIDIRRIT CONTACT DERM.SKIN ABSORP NOT SIGNIF.EYE:ACID IRRIT.INGEST:HANDS(SIGN/SYMP)

Explanation of Carcinogenicity:PER MSDS:IARC CLASSIFY STRONG INORG ACID MSIT CONTAINING SULFUREI ACID CAT 1;DOESN'T APPLY TO LIQ FORMS OF SOLN IN BATT.

Effects of Overexposure:CONTAM BY CONTACT W/INTERNAL COMP CAN CAUSE

PB/PB CMPDS INEST;WASH PRIOR TO EAT/DRINK/SMOKE.GI UPSET,LOSS OF APPETITE,DIARR,CONSTIPATION W/CRAMPS,DIFFI SLEEP,FTG,CORNEAL DMG,IRRIT MUC MEMB,UPPER RESP/ LUNG IRRIT.PB/CMPD:CHRONIC ANEMIA,KIDNEY/CNS DMG,REPROD SYS DMG.CORNEA SCARRING,CHRONIC BRONCHITIS,TOOTH ENAMAL EROSION

Medical Cond Aggravated by Exposure:INORG PB/CMPDS AGGRAVATE CHRONIC FORMS OF KIDNEY/LIVER/NEUROLOGIC DISEASES.CONTACT OF BATT ELECTROLYTE(ACID) W/SKIN MAY AGGRAVATE SKIN DISEASE SUCH AS EXZEMA & CONTACT DERMATITIS.

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

First Aid:INHAL:REMOVE FROM EXPO.ANY ACUE EFFECTS DEVELOP CONSULT PHYSICIAN.SKIN:WASH THOROUGHLY W/SOAP/WATER.CONMES INTO CONTACT W/CLOTH REMOVE/DISCARD.EYE:IMMED RINSE W/COOL RUNNING WATER FOR @LEAST 15MINS.SE EK MED ATTN AFT RINSING.INGEST:PB/PB CMPDS:CONSULT PHYSICIAN.ELECTROLYTE:DO NOT INDUCE VOMIT.REFET TO PHYSICIAN IMMED.

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

Flash Point:487F,253C H2

Lower Limits:4.1 HYDROGEN

Upper Limits:74.2 HYDROGM

Extinguishing Media:DRY CHEMICAL, FOAM, CO2.

Fire Fighting Procedures:USE POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire/Explosion Hazard:H2/O2 GASES PRODUCE IN CELLS DURING NORMAL BATT OPERATION.GASES ENTER AIR THRU VENT CAPS.TO AVOID CHANCE OF FIRE/EXPLO KEEP SPARKS/IGN SOURCES AWAY FROM BATTERY

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

Spill Re

Release Procedures:NONE SPECIFIED BY MANUFACTURER. HMIS:FOLLOW ALL APPLICABLE PROCEDURES.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:NONE SPECIFIED BY MANUFACTURER.

Other Precautions:NONE SPECIFIED BY MANUFACTURER.

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

Respiratory Protection:NONE REQUIRED UNDER NORMAL HANDLING CONDITIONS.DURING BATTERY FORMATION(HIGH-RATE CHARGE CONDITION)ACID

MIST CAN BE GENERATED WHICH MAY CAUSE RESPIRATORY IRRITATION.IRRITATION OCCURS WEAR RESPIRATOR SUITABLE FOR PROTECTION AGAINST ACID MIST.

Ventilation:ADEQUATE VENTILATION.REQUIRED FOR BATTERY UTILIZED FOR STANDBY POWER GENERATION.NEVER RECHARGE BATTERY IN UNVENTILATED ENCLOSURE

Protective Gloves:VINYL COATED,PVC GAUNTLET TYPE GLOVES.

Eye Protection:CHEMICAL SPLASH GOGGLES,VISOR-GOGGLES,CHEMICAL FACE SHIELD

Other Protective Equipment:SAFETY SHOES RECOMMENDED WHEN HANDLING BATTERY.ALL FOOTWEAR MUST MEET ANSI Z41.1

REQUIREMENTS.

Work Hygienic Practices:DON'T REMOVE VENT CAP.FOLLOW SHIPPING/HANDLING INSTRUCTIONS APPLICABLE TO BATTERY TYPE.AVOID DAMAGE TO TERMINALS/SEALS DON'T DOUBLE-STACK.

Supplemental Safety and Health

BOILING POINT:LEAD 1755C,BATTERY ELECTROLYTE 110-112C. BATTERY ELECTROLYTE (ACID) CLEAR TO CLOUDY LIQUID ABSORBED BY INTER BATTERY COMPONENTS.ACID SATURATED PEROXIDE DARK RED-BROWN TO GRAY SOLID WITH SLIGHT ACIDIC ODOR.BATTERY ELECTROLYTE (ACID) 100% SOLUBLE IN WATER.LEAD-LEAD DIOXIDE ARE NOT SOLUBLE. INCOMPATIBLE:PICRATES,FULMINATES.

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

HCC:N1

Boiling Point:Boiling Point Text:SUPPLEMENTAL

Melt/Freeze Point:Melt/Freeze Point Text:621F,327C

Decomposition Temp:Decomposition Temp Text:NP

Vapor Pressure:11.7 ACID

Vapor Density:3.4 ACID

Specific Gravity:1.3 ACID

pH:NP

Evaporation Rate & Reference:NOT DETERMINED.

Solubility in Water:SUPPLEMENTAL.

Appearance and Odor:SUPPLEMENTAL.

Percent Volatiles by Volume:N/DETERMINED

Corrosion Rate:NP

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

Stability Indicator/Maximum

terials to Avoid: YES

P, S, K, CARBIDS, SULFIDE, PEROXIDES, COMBUST MATL, STORNG RED AGENTS, MOST METALS, CARBIDES, ORG MATLS, CHLORATES, NITRATES, (SUPPL)

Stability Condition to Avoid: SPARKS & OTHER SOURCES OF IGNITION. HIGH TEMP. BATT ELECTRO RX W/WATER TO PRODUCE HEAT. CAN RX W/OXIDIZING/REDUCING AGENTS.

Hazardous Decomposition Products: PB/PB CMPDS: OXIDES OF LEAD & SULFUR. BATT ELECTROLYTE: HYDROGEN, SULFUR DIOXIDE, SULFUR TRIOXIDE.

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===== Disposal Considerations =====
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Waste Disposal Methods: NONE SPECIFIED BY MANUFACTURER. HMIS: FOLLOW ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS.

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