

JOHNSON CONTROLS GLOBE BATTERY -- 29H-30-H-VHD, LEAD ACID BATTERY

MSDS Safety Information

FSC: 6140  
NIIN: 01-319-5566  
MSDS Date: 06/02/2000  
MSDS Num: CLCGP  
Product ID: 29H-30-H-VHD, LEAD ACID BATTERY  
MFN: 01  
Article: Y  
Responsible Party  
Cage: 25244  
Name: JOHNSON CONTROLS INC GLOBE BATTERY DIV  
Address: 5757 N GREEN BAY AVE  
Box: 591  
City: MILWAUKEE WI 53201  
Info Phone Numb  
er: 800-333-222X3138/ 414-228-1200  
Emergency Phone Number: 800-333-2222X3138  
Resp. Party Other MSDS No.: L 8

Item Description Information

Item Manager: S9G  
Item Name: BATTERY,STORAGE  
Unit of Issue: EA  
UI Container Qty: 1  
Type of Container: UNKNOWN

Regulated Components

Regul  
ated Component Name: LEAD DIOXIDE: LEAD OXIDE  
CAS: 1309-60-0  
Percent Text: 31%  
Regulated Component Name: LEAD SULFATE: ANGIESTIC  
CAS: 7446-14-2  
Regulated Component Name: SULFURIC ACID, 35%: BATTERY ELECTROLYTE  
CAS: 7664-93-9  
Percent Text: 34%  
Regulated Component Name: LEAD: GRID  
CAS: 7439-92-1  
Percent Text: 34%

Health Hazards Data

Route Of Entry Inds - Inhalation: YES  
Skin: YES  
Ingest

ion: YES

Carcinogenicity Inds - NTP: YES

IARC: YES

Effects of Exposure: INHALTION: ACID MIST GENERATED DURING BATTERY FORMATION MAY CAUSE RESPIRATORY IRRITATION. SPILLAGE OF ACID FROM BATTERIES IN CONFINED AREAS MAY ALSO LEAD TO EXPOSURE OF SULFURIC ACID MIST. SKIN: BATTE RY ELECTROLYTE (ACID) MAY CAUSE IRRITATIVE CONTACT DERMATITIS. SKIN: NOT A SIGNIFICANT ROUTE OF ENTRY. EYE: BATTERY ELECTROLYTE (ACID) WILL IRRITATE THE EYES UPON CONTACT. INGESTION: HANDS CONTAMINATE D BY CONTACT WIT

H INTERNAL

COMPONENTS OF A BATTERY VAN CAUSE INGESTION OF LEAD/LEAD COMPOUNDS. HANDS SHOULD BE WASHED PRIOR TO EATING, DRINKING, OR SMOKING.

Signs And Symptions Of Overexposure: ACUTE EFFECTS TO LEAD COMPOUNDS ARE GASTROINTESTINAL UPSET, LOSS OF APPETITE, DIARRHEA, CONSTIPATION WITH CRAMPTING, DIFFICULTY IN SLEEPING & FATIGUE. EXPOSURE &/OR CONTACT WITH BATTERY ELECTROLYTE (A CID) MAY LEAD TO ACUTE IRRITATION OF THESKIN, CORNEAL DAMAGE OF EYES, IRRITATION OF THE MUCOUS MEMBRA

NES OF THE EYES &

UPPER RESPIRATORY SYSTEM, INCLUDING LUNGS. CHRONIC: LEAD & ITS COMPOUNDS MAY CAUS E ANEMIA, DAMAGE TO KIDNEYS & NERVOUS SYSTEM. LEAD MAY ALSO CAUSE REPRODUCTIVE SYSTEM DAMAGE & CAN AFFECT DEVELOPING FETUSES IN PREGNANT WOMEN. BATTERY ELECTROLYTE(ACID) MAY LEAD TO SCARRING OF THE CO RNEA, CHRONIC BRONCHITIS.

Medical Cond Aggravated By Exposure: INORGANIC LEAD & ITS COMPOUNDS CAN AGGRAVATE CHRONIC FORMS OF KIDNEY, LIVER, & NEUROLOGICAL DISEASE. CONTACT

OF BATTERY ELECTROLYTE (ACID) WITH SKIN MAY AGGRAVATE ECZEMA & CONACT DERMATITIS.

First Aid: INHALTION: REMOVE FROM EXPOSURE AND CONSULT PHYSICIAN IF ANY OF ACUTE EFFECTS LISTED DEVELOPS. SKIN: WASH THOROUGHLY WITH SOAP AND WATER. IF ACID IS SPLASHED ON CLOTHING, REMOVE AND DISCARD. IF ACID I S SPLASHED IN SHOES, REMOVE THEM IMMEDIATELY AND DISCARD. ACID CANNOT BE REMOVED FROM LEATHER. EYE: IMMEDIATELY RINSE WITH COOL RUNNING WTER FOR AT LEAST 15 MINUTES. SEEK MEDICAL

ATTENTION AFTER RINSI NG. INGESTION: LEAD/LEAD

COMPOUNDS: CONSULT A PHYSICIAN. BATTERY ELECTROLYTE (ACID): DO NOT INDUCE VOMITING. REFER TO A PHYSICIAN IMMEDIATELY.

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Handling and Disposal

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Spill Release Procedures: REMOVE COMBUSTIBLE MATERIALS/IGNITION SOURCES. CONTAIN SPILL BY DIKING WITH SODA ASH (SODIUM CARBONATE) OR QUICKLIME(CALCIUM OXIDE). COVER SPILL WITH EITHER CHEMICAL.

MIX WELL. MAKE CERTAIN THE MIX IS  
NEUTRAL, COLLECT RESIDUE IN A DRUM OR OTHER SUITABLE CONTAINER. DISPOSE OF AS  
A HAZARDOUS WASTE. WEAR ACID-RESISTANT BOOTS, CHEMICAL FACE SHIELD, CHEMICAL  
SPASH GOGGLES, & ACID-RESISTANT GLOVES.  
Neutralizing Agent: SODA ASH (SODIUM CARBONATE) OR QUICKLIME(CALCIUM OXIDE).  
COVER SPILL WITH EITHER CHEMICAL. MIX WELL.  
Waste Disposal Methods: BATTERY ELECTROLYTE (ACID) NEUTRALIZE AS ABOVE FOR A  
SPILL, COLLECT RESIDUE, AND PLACE IN A DRUM OR SUITABLE C  
ONTAINER. DISPOSE OF  
AS A HAZARDOUS WASTE. DO NOT FLUSH LEAD-CONTAMINATED ACID INTO SEWER.  
BATTERIES: SEND TO LEAD SMELTER FOR RECLAMATION FOLLOWING APPLICABLE FEDERAL,  
STATE, & LOCAL REGULA TIONS.  
Handling And Storage Precautions: STORE LEAD ACID BATTERIES WITH ADEQUATE  
VENTILATION. WEAR RECOMMENDED EYE PROTECTION. IF CLOTHING BECOMES SATURATED  
WITH ACID, REMOVE AND WASH AFFECTED AREA WITH WATER FOR 15 MINUTES. DISCARDED  
SATURA TED CLOTHING.  
Other Precautions: AN EYEWASH FOUNTA  
IN & SAFETY SHOWER SHOULD BE LOCATED IN  
OR NEAR THE PRODUCTION OR STORAGE AREA(S) FOR LEAD/LEAD ACID BATTERIES. SUCH  
STORAGE AREAS SHOULD BE EQUIPPED WITH A CONTAINMENT FACILITY WHICH CAPTURES  
ACID SPILLS SO THAT THEY MAY BE NEUTRALIZED, COLLECTED, & DISPOSED OF  
PROPERLY.

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Fire and Explosion Hazard Information  
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Flash Point: =269.C, 516.2F  
Flash Point Text: HYDROGEN  
Auto  
ignition Temp: =580.C, 1076.F  
Autoignition Temp Text: HYDROG  
Lower Limits: 4.1, H2  
Upper Limits: 74.2, H2  
Extinguishing Media: DRY CHEMICAL, FOAM, OR CO2.  
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, HYDROGEN IS FLAMMABLE & OXYGEN SUPPORTS  
COMBUSTION. THESE GASES ENTER THE AIR THROUGH THE VENT CAPS. TO AVOID THE  
CHANCE OF A FIRE OR EXPL  
OSION, KEEP SPARKS & OTHER SOURCES OF IGNITION  
AWAY FROM THE BATTERY.

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Control Measures  
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Respiratory Protection: NONE REQUIRED UNDER NORMAL HANDLING CONDITIONS. DURING  
BATTERY FORMATION (HIGH-RATE CHARGE CONDITIONS), ACID MIST CAN BE GENERATED,  
WHICH MAY CAUSE RESPIRATORY IRRITATION. IF IRRITATION OCCURS, WEAR A  
RESPIRATOR SUITABLE FOR PROTECTION AGAINST ACID MIST  
Ventilati

on: ROOM VENTILATION IS REQUIRED FOR BATTERIES UTILIZED FOR STANDBY POWER GENERATION. NEVER RECHARGE BATTERIES IN AN UNVENTILATED, ENCLOSED SPACE.

Protective Gloves: VINYL-COATED, PVC, GAUNTLET=TYPE GLOVES WITH ROUGH FINISH.

Eye Protection: CHEMICAL SPLASH GOGGLES ARE PREFERRED.

Other Protective Equipment: ALSO ACCEPTABLE ARE "VISOR-GOGS" OR A CHEMICAL FACE SHIELD WORN OVER SAFETY GLASSES WITH SOLID SIDE SHIELD. "SEE OTHER INFORMATION"

Work Hygienic Practices: WASH HANDS THOROUGHLY BEFOR

E EATING, DRINKING, OR

SMOKING AFTER HANDLING BATTERIES. "SEE OTHER INFORMATION"

Supplemental Safety and Health: CHEMICAL/TRADE NAME: LEAD ACID BATTERY.

CHEMIVAL FAMILY/CLASSIFICATION: ELECTRIC STORAGE BATTERY. SYNONYMS/COMMON NAME: SLI BATTERY. \* RATING FOR SULFURIC ACID: 3, 0, 2, X.

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#### Physical/Chemical Properties

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HCC: C1

Boiling Point: =1755.C, 3191.F

B.P. Text: LEAD

Melt/Freeze

Pt: =327.4C, 621.3F

M.P/F.P Text: LEAD

Decomp Text: UNKNOWN

Vapor Pres: 11.7, ACID

Vapor Density: 3.4, ACID

Spec Gravity: 1.210-1.300 (ACID)

Evaporation Rate & Reference: NOT DETERMINED

Solubility in Water: LEAD/ACID SOLUBLE

Appearance and Odor: ACID: CLEAR TO CLOUDY LIQUID; SLIGHT ACIDIC ODOR. LEAD OXIDE

Corrosion Rate: UNKNOWN

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#### Reactivity Data

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Stability Indicator: YES MINATES.

Stability Condition To Avoid: SPARKS AND OTHER SOURCES OF IGNITION MAY IGNITE HYDROGEN GAS.

Materials To Avoid: LEAD/LEAD COMPOUNDS: POTASSIUM, CARBIDES, SULFIDES, PEROXIDES, PHOSPHORUS, SULFUR. BATTERY ACID: COMBUSTIBLE MATERIALS, STRONG REDUCING AGENTS, MOST METALS, CARBIDES, ORGANIC MATERIALS, CHLORATES, NITRATES, PICRATES, AND FU

Hazardous Decomposition Products: LEAD/LEAD COMPOUNDS: OXIDES OF LEAD AND SULFUR. BATTERY ELECTROLYTE (ACID): HYDROGEN, SULFUR DIOXIDE, SULFUR TRIOXIDE

Hazardous Polymerization Indicator: NO  
Conditions To Avoid Polymerization: HIGH TEMPERATURE. ACID WILL REACT EITH  
WATER TO PRODUCE HEAT. CAN REACT WITH OXIDIZING OR REDUCING AGENT.

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Toxicological Information

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Ecological Information

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MSDS Transport Information

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Transport Information: DOT, IATA AND IMO DESCRIPTION: BATTERY, WET, FILLED WITH  
ACID, UN2794, CLASS 8.

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Regulatory Information

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Sara Title III Information: NOTE: THE CONTENTS OF THIS PRODUCT ARE TOXIC  
CHEMICALS THAT AR SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 302 AND  
313 OF  
THE EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOWN ACT OF 1986 (40CFR  
35 5 AND 372).

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Other Information

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Other Information: \*SAFETY SHOES WORN WITH RUBBER OR NEOPRENE BOOTS OR  
STEEL-TOED RUBBER OR NEOPRENE BOOTS WORN OVER SOCKS. PLACE PANTS LEGS OVER  
BOOTS TO KEEP ACID OUT OF BOOTS. ALL FOOTWARE MUST MEET REQUIREMENTS OF A  
NSIZ41.1-REV.1972. \*DO NOT RELEASE UNNEUTRALIZED ACID!  
\*\*MAKE CERTAIN VENT  
CAPS ARE ON TIGHTLY. PLACE A MINIMUM OF TWO LAYERS OF CORRUGATED CARDBOARD  
BETWEEN LAYERS OF BATTERIES. WHEN STACKING IN TRAI LERS, STCK 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 THE VENTS. AVOID CONTACT WITH  
INTERNAL COMPONETS OF BAT TERY.

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Transportation Information

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Responsible Party Cage: 25244  
Trans ID NO: 156829  
Product ID: 29H-30-H-VHD, LEAD ACID BATTERY  
MSDS Prepared Date: 06/02/2000  
Review Date: 04/25/2001  
MFN: 1  
Multiple KIT Number: 0  
Review IND: Y  
Unit Of Issue: EA  
Container QTY: 1  
Type Of Container: UNKNOWN

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Detail DOT Information

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DOT PSN Code: BQN  
DOT Proper Shipping Name: BATTERIES, WET, FILLED WITH ACID  
DOT PSN Modifier: ELECTRIC STORAGE  
Hazard Class: 8  
UN ID Num: UN2794  
DOT Packaging Group: III  
Label: CORROSIVE  
Non Bulk Pack: 159  
Bulk Pack: 159  
Max Qty Pass: 30 KG GRO  
Max Qty Cargo: NO LIMIT  
Vessel Stow Req: A

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Detail IMO Information

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IMO PSN Code: BWD  
IMO Proper Shipping Name: BATTERIES, WET, FILLED WITH ACID  
IMO PSN Modifier: ELECTRIC STORAGE  
IMDG Page Number: 8120  
UN Number: 2794  
UN Hazard Class: 8  
IMO Packaging Group: III  
Subsidiary Risk Label: -  
EMS Number: 8-10  
MED First Aid Guide NUM: 700

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Detail IATA Information

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IATA PSN Code: CZM  
IATA UN ID Num: 2794  
IATA Proper Shipping Name: BATTERIES, WET, FILLED WITH ACID,  
IATA PSN Modifier: ELECTRIC STORAGE +  
IATA UN Class: 8  
IATA Label: CORROSIVE  
UN Packing Group: III  
Packing Note Passenger: 800  
Max Quant Pass: NO LIMIT  
Max Quant Cargo: NO LIMIT

Packaging Note Cargo: 800

Exceptions: A51

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Detail AFI Information

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AFI PSN Code: CZM

AFI Proper Shipping Name: BATTERIES, WET, FILLED WITH ACID

AFI PSN Modifier: ,ELECTRIC STORAGE

AFI Hazard Class: 8

AFI UN ID NUM: UN2794

AFI Packing Group: III

Special Provisions: P5

Back Pack Reference: A12.5

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HAZCOM Label

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Product ID: 29H-30-H-VHD, LEAD ACID BATTERY

Cage: 25244

Company Name: JOHNSON CONTROLS INC GLOBE BATTERY DIV

Street: 5757 N GREEN BAY AVE

PO Box: 591

City: MILWAUKEE WI

Zipcode: 53201

Health Emergency Phone: 800-333-2222X3138

Label Required IND: Y

Date Of Label Review: 04/25/2001

Status Code: A

Origination Code: F

Chronic Hazard IND: Y

Eye Protection IND: YES

Skin Protection IND: YES

Signal Word: DANGER

Respiratory Protection IND: YES

Health Hazard: Severe

Contact

Hazard: Severe

Fire Hazard: None

Reactivity Hazard: Moderate

Hazard And Precautions: INHALTION: ACID MIST GENERATED DURING BATTERY FORMATION  
MAY CAUSE RESPIRATORY IRRITATION. SPILLAGE OF ACID FROM BATTERIES IN CONFINED  
AREAS MAY ALSO LEAD TO EXPOSURE OF SULFURIC ACID MIST. SKIN: BATTE RY  
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BY CONTACT WITH INTERNAL

COMPONENTS OF A BATTERY VAN CAUSE INGESTION OF LEAD/LEAD COMPOUNDS. HANDS SHOULD BE WASHED PRIOR TO EATING, DRINKING, OR SMOKING.

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