

DELPHI ENERGY/ENGINE MNG SYS,DIV DELPHI AUTO SYS -- STORAGE BATTERY, WET ALL DELCO BATTERIES -- 6140-00-753-1843

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

Product ID:STORAGE BATTERY, WET ALL DELCO BATTERIES

MSDS Date:08/15/1996

FSC:6140

NIIN:00-753-1843

Status Code:A

MSDS Number: CJHCT

=== Responsible Party ===

Company Name:DELPHI ENERGY/ENGINE MNG SYS,DIV DELPHI AUTO SYS

Address:4800 S. SAGINAW ST. (GEN MOTORS CORP)

City:FLINT

State:MI

ZIP:48501-1360

Country:US

Info Phone Num:317-579-3354

Emergency Phone Num:313-556-1597

CAGE:NO291

=== Contractor Identification ===

Company Name:ATLANTIC BATTERY CO INC

Address:80 ELM ST

Box:171

City:WATERTOWN

State:MA

ZIP:02172-2823

Country:US

Phone:617-924-2868/800-424-9300

Contract Num:DAAB07-87-P-0106

CAGE:14309

Company Name:DELPHI ENERGY/ENGINE MNG SYS,DIV DELPHI AUTO SYS

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===== Composition/Information on Ingredients =====

Ingred Name:LEAD

CAS:7439-92-1

RTECS #:OF7525000

= Wt:50.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.05 MG/M3

Code:F

ACGIH TLV:0.15 MG/M3

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID

CAS:7664-93-9

RTECS #:WS5600000

ER
CAS:7732-18-5
RTECS #:ZC0110000
= Wt:25.
Other REC Limits:NONE RECOMMENDED

Ingred Name:POLYPROPYLENE/POLYOXYETHYLENE COPOLYMER
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:TLV FOR SULFURIC ACID: 1 MG/M3
Routes of Entry: Inhalation:YES Skin:NO Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:YES OSHA:NO
Health Hazards Acute and Chronic:TARGET ORGANS: NERVOUS SYSTEM, BLOOD
SYSTEM AND KIDNEYS. ACUTE - EF
EFFECTS OF OVEREXPOSURE: INHALATION:
SULFURIC ACID MISTS IRRITATE NOSE AND THROAT AND MAY CAUSE
RESPIRATORY DIFFICULTY. EYE: SULFURIC ACID MISTS OR LIQUID
IRRITATES EYES AND MAY CAUSE CHEMICAL BURNS. SEVERITY DEPENDS ON
ACID CONCENTRATION AND DURATION OF CONTACT. SCARING OF THE CORNEA
IS POSSIBLE. SKIN: SULFURIC ACID MISTS OR LIQUID IRRITATES SKIN
AND MAY CAUSE CHEMICAL BURNS. INGESTION: SULFURIC ACID MISTS OR
LIQUID IRRITATES THE MUCOUS MEMBRANE AND MAY CAUSE CHEMICAL
L BURNS.
CHRONIC - REPEATED PROLONGED EXPOSURE BY INGESTION MAY DAMAGE
TOOTH ENAMEL.
Explanation of Carcinogenicity:CONTAINS LEAD.
Effects of Overexposure:SEVERE BURNS, SEVERE IRRITATION, SEVERE PAIN,
NAUSEA, VOMITING, DIARRHEA, DEEP SKIN ULCERS, BLISTERING, ITCHING,
WATERING OF EYES, REDNESS, COUGHING, CHOKING, SHORTNESS OF BREATH,
BREATHING DIFFICULTY, EROSION OF TOOTH ENAMEL
Medical Cond Aggravated by Exposure:PULMONARY EDEMA, BRONCHITIS,
EMPHYSEMA, ECZEMA, CONTACT
DERMATITIS, DENTAL EROSION

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

First Aid:SEEK MEDICAL ATTENTION IMMEDIATELY IN ALL CASES OF EXPOSURE.
INHALATION: REMOVE FROM EXPOSURE. EYES: FORCE EYES OPEN AND RINSE
WITH CLEAN, COOL, RUNNING WATER FOR 15 MINUTES. DO NOT USE EYE
DROPS OR OTHER MEDICATION UNLESS ADVISED TO DO SO BY A DOCTOR.
SKIN: FLUSH THE EXPOSED WITH LARGE AMOUNT OF RUNNING WATER FOR 15
MINUTES. REMOVE CONTAMINATED CLOTHING. INGESTION: D

O NOT INDUCE

VOMITING. IF VICTIM IS CONSCIOUS, DRINK LARGE QUANTITY OF MILK OR WATER. FOLLOW WITH MILK OF MAGNESIA, BEATEN EGG, EGG WHITES OR VEGETABLE OIL.

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

Extinguishing Media: CLASS ABC EXTINGUISHER, CARBON DIOXIDE, FOAM, HALON, WATER SPRAY

Fire Fighting Procedures: COOL EXTERIOR OF BATTERY IF EXPOSED TO FIRE TO PREVENT RUPTURE. ACID MISTS AND VAPORS IN A FIRE ARE CORROSIVE. WEAR PROTECTIVE CLOTHING AND USE SELF-CONTAINED BREATHING APPARATUS (SCBA).

Unusual Fire/Explosion Hazard: HYDROGEN AND OXYGEN GASES ARE PRODUCED DURING NORMAL BATTERY OPERATION AND CHARGING. THESE GASES ESCAPE THROUGH THE BATTERY VENTS AND MAY FORM AN EXPLOSIVE ATMOSPHERE AROUND THE BATTERY IF VENTILATION IS POOR. SULFURIC ACID CAN IGNITE COMBUSTIBLES.

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

Spill Release Procedures: SMALL SPILL: NEUTRALIZE WITH BAKING SODA, HOUSEHOLD

AMMONIA AND/OR WATER. RINSE CLEAN. LARGE SPILL: DIKE AND NEUTRALIZE WITH SODA ASH, QUICKLIME. COVER SPILL WITH NEUTRALIZING AGENT. MIX WELL. WHEN MIXTURE IS NEUTRAL, COLLECT RESIDUE IN A SUITABLE CONTAINER FOR DISPOSAL. WEAR ACID RESISTANT BOOTS, FACE SHIELD, CHEMICAL SPLASH GOGGLES, AND ACID RESISTANT GLOVES. DO NOT RELEASE UNNEUTRALIZED ACID.

Neutralizing Agent: BAKING SODA (SODIUM BICARBONATE), HOUSEHOLD AMMONIA, SODA ASH (SODIUM CARBONATE), QUICKLIME (CALCIUM OXIDE)

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

Handling and Storage Precautions: STORE BATTERIES UNDER ROOF IN COOL, DRY, WELL-VENTILATED AREA AWAY FROM IGNITION SOURCES. BATTERIES MUST BE KEPT IN AN UPRIGHT POSITION. STACK BATTERIES SO AS TO PREVENT ACCIDENTAL CONTACT BETWEEN TERMINALS. KEEP A SUPPLY OF NEUTRALIZING AGENT IN OR NEAR STORAGE AREA FOR EMERGENCY USE.

Other Precautions: USE A BATTERY CARRIER TO LIFT A BATTERY OR PLACE HANDS AT OPPOSITE CORNERS

ERS TO AVOID SPILLING ACIDS THROUGH THE VENTS. AVOID CONTACT WITH INTERNAL COMPONENTS OF BATTERIES. DO NOT TILT BATTERIES TO AN ANGLE GREATER THAN 45 DEGREES. DO NOT SMOKE WHEN WORKING NEAR A BATTERY. PREVENT SHORT CIRCUIT.

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

Respiratory Protection:USE NIOSH APPROVED RESPIRATORY PROTECTION WHEN CONCENTRATIONS EXCEED EXPOSURE GUIDELINES.

Ventilation:MUST BE PROVIDED WHEN CHARGING IN AN ENCLOSED AREA (29 CFR 1

910.178(G) AND 305 (J)(7).

Protective Gloves:ACID RESISTANT GLOVES SUCH AS RUBBER, NEOPRENE, VINYL COATED, PVC

Eye Protection:CHEMICAL SPLASH GOGGLES OR A FULL FACE SHIELD WITH SAFETY GLASSES

Other Protective Equipment:ACID RESISTANT CLOTHING WITH RUBBER/NEOPRENE BOOTS FOR MAJOR SPILL CLEAN UP. LAB APRON, ACID RESISTANT STEEL-TOED BOOTS AND PROTECTIVE CLOTHING. FIRE CODES MAY REQUIRE EXPLOSION PROOF FANS AND EQUIPMENT

Work Hygienic Practices:FOLLOW GOOD PERSONAL HYGIENE PRACTICES. KEEP

WORK AREA CLEAN. WASH AFTER HANDLING AND BEFORE EATING, DRINKING OR SMOKING.

Supplemental Safety and Health

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

HCC:Z4

Melt/Freeze Pt:=-28.9C, -20.F

M.P/F.P Text:FULLY CHARGED

Spec Gravity:1.2800

pH: