OPTIMA BATTERIES INC -- 34/78-1050 ENGINE STARTING BATTERIES (GROUP 34) -- 6140-01-457-4339

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

Product ID:34/78-1050 ENGINE STARTING BATTERIES (GROUP 34)
MSDS Date:12/09/1999
FSC:6140
NIIN:01-457-4339
Status Code:A
MSDS Number: CKGPM
=== Responsible Party ===
Company Name:OPTIMA BATTERIES INC
Address:17500 E 22ND AVENUE
City:AURORA
State:CO
ZIP:80011
Country:US
I
nfo Phone Num:303-448-8899/448-8899
Emergency Phone Num:(800)424-9300
Resp. Party Other MSDS Num.:OBI-0001D
Chemtrec Ind/Phone:(800)424-9300
CAGE:0UJ55
=== Contractor Identification ===
Company Name:OPTIMA BATTERIES INC
Address:17500 E 22ND AVENUE
Box:City:AURORA
State:CO
ZIP:80011
Country:US
Phone:303-448-8899 OR 800-292-4359
CAGE:0UJ55

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

Ingred Name:LEAD COMPOUNDS
CAS:7439-92-1
RTECS #:OF7525000
Minumum % Wt:63.
Maxumum % Wt:

81.
ACGIH TLV:0.15 MG/M3
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:SULFURIC ACID ELECTROLYTE
CAS:7664-93-9
RTECS #:WS5600000
Minumum % Wt:17.
Maxumum % Wt:25.
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3
ACGIH STEL:3 MG/M3
EPA Rpt Qty:1000 LBS
DOT Rpt Qty:1000 LBS

Ingred Name:POLYPROPYLENE CASE MATERIAL
CAS:9003-07-0
RTECS #:UD1842000
Minumum % Wt:2.
Maxumum % Wt:6.

Ingred Name:SEPARATOR/PASTER PAPER FIBROUS GLASS
CAS:65997-17-3
Code:F
Minumum % Wt:1.
Maxumum % Wt:4.

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

LD50 LC50 Mixture:NONE STATED BY MANUFACTURER
Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:NONE EXPECTED FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE. IN ITS MANUFACTURED AND SUPPLIED STATE, THE PRODUCT IS CONSIDERED NON-HAZARDOUS. KEEP AWAY FROM FLAMES DURING AND IMMEDIATELY AFTER C HARGE. NO SIGNIFICANT HEALTH EFFECTS ARE ASSOCIATED WITH T
HE PRODUCT.
Explanation of Carcinogenicity:NOT APPLICABLE FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE.
Effects of Overexposure:NONE EXPECTED FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE.
Medical Cond Aggravated by Exposure:NONE EXPECTED FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE.

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

First Aid:NONE EXPECTED FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE. INHALED-IF ACID VAPOR RELEASED

, REMOVE PERSON TO FRESH AIR. IF
BREATHING IS DIFFICULT, ADMINISTER ARTIFICIAL RESPIRATION/ OXYGEN.
SEE K MEDICAL ATTENTION. EYES-IF ELECTROLYTE ENTERS EYES, FLUSH
WITH WATER FOR AT LEAST 15 MINUTES. SEEK PROMPT MEDICAL ATTENTION.
SKIN-IF ELECTROLYTE CONTACTS SKIN, FLUSH WITH MILD SOAP & WATER.
SEEK MED ICAL ATTENTION IF IRRITATION DEVELOPS. INGESTION- SEEK
PROMPT MEDICAL ATTENTION.

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

Extinguishing Media
:MULTIPURPOSE DRY CHEMICAL OR MULTIPURPOSE CARBON
DIOXIDE (CO2).
Fire Fighting Procedures:BATTERY WILL BURN IF INVOLVED IN A FIRE.
EVACUATE AREA. SELF-CONTAINED BREATHING APPARATUS MUST BE WORN TO
PREVENT POSSIBLE INHALATION OF ACID MISTS, SMOKE AND DECOMPOSITION
PRODUCTS IN A FIRE. REMOVE ALL IGNITION SOURCES. COOL BATTERY (S)
TO PREVENT RUPTURE.
Unusual Fire/Explosion Hazard:HYDROGEN GAS MAY BE PRODUCED AND MAY
EXPLODE IF IGNITED. REMOVE ALL IGNITION SOURCES. VENTILATE
AREA.

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

Spill Release Procedures:AVOID CONTACT WITH ACID MATERIALS. USE SODA
ASH, BAKING SODA OR LIME TO NEUTRALIZE ACID IF RELEASED.
Neutralizing Agent:SODA ASH, BAKING SODA, LIME.

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

Handling and Storage Precautions:DO NOT CARRY BATTERY BY TERMINALS. DO
NOT DROP BATTERY, PUNCTURE OR ATTEMPT TO OPEN BATTERY CASE. KEEP
AWAY FROM FLAMES DURING AND IMME
DIATELY AFTER CHARGE. AVOID
PROLONGED OVERCHARGES IN CONFINED ARE AS. STORE AT AMBIENT ROOM
TEMPERATURE. DO NOT SUBJECT PRODUCT TO OPEN FLAME OR FIRE.
Other Precautions:AVOID CONDITIONS WHICH COULD CAUSE ARCING BETWEEN
BATTERY TERMINALS. WASH HANDS THOROUGHLY BEFORE EATING OR SMOKING
AFTER HANDLING BATTERIES.

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

Respiratory Protection:NOT NECESSARY UNDER NORMAL CONDITIONS OF USE FOR
FINISHED PRODUCT.
Ventilati

on:NOT NECESSARY UNDER NORMAL CONDITIONS OF USE FOR FINISHED PRODUCT.
Protective Gloves:NOT NECESSARY UNDER NORMAL CONDITIONS OF USE FOR FINISHED PRODUCT.
Eye Protection:NOT NECESSARY UNDER NORMAL CONDITIONS OF USE FOR FINISHED PRODUCT.
Other Protective Equipment:NOT NECESSARY UNDER NORMAL CONDITIONS OF USE FOR FINISHED PRODUCT.
Work Hygienic Practices:NOT NECESSARY UNDER NORMAL CONDITIONS OF USE FOR FINISHED PRODUCT.
Supplemental Safety and Health
THE OPTIMA SEALED LEAD ACID
BATTERY IS CONSIDERED AN ARTCLE AS DEFINED BY 29 CFR 1910.1200 (C) OSHA HAZCOM. THE INFORMATION ON THIS SHEET IS SUPPLIED AT THE CUSTOMER'S REQUEST FOR INFORMATION ONLY.

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

HCC:Z4
Appearance and Odor:SEALED LEAD ACID BATTERY.

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

Stability Indicator/Materials to Avoid:YES
NONE STATED BY MANUFACTURER.
Stability Condition to Avoid:AVOID SHORTING, USE ONLY A
PPROVED CHARGING METHODS. DO NOT PUNCTURE BATTERY CASE.
Hazardous Decomposition Products:NONE STATED BY MANUFACTURER.
Conditions to Avoid Polymerization:WILL NOT OCCUR.

========== Toxicological Information ==========

Toxicological Information:THREASHOLD LIMIT VALUE: NONE APPLICABLE FOR FINISHED PRODUCT. ROUTE OF ENTRY: NONE APPLICABLE FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE. SIGNS OF SYMPTOMS OF ACUTE EXPOSURE: NONE EXPECTED FO R FINISHED PRODUCT
UNDER NORMAL CONDITIONS OF USE. CHRONIC EXPOSURE: NONE EXPECTED FOR FINISHED PRODUCT UNDER NORMAL CONDITIONS OF USE. EFFECTS OF OVEREXPOSURE, CONDITIONS TO AVOID: NO EXPOSURE EXPEC TED FOR FINISHED PRODUCT.HOWEVER, DO NOT PUNCTURE OR OPEN BATTERY CASE. ACID ELECTROLYTE MAY BE RELEASED, WHICH IS CORROSIVE..

========== Ecological Information ==========

Ecological:NONE STATED BY MANUFACTURER.

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

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Waste Disposal Methods:DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. SEND TO A LEAD RECYCLING FACILITY WHICH FOLLOWS APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS FOR ROUTINE DISPOSAL OF SPENT OR DAMAGED BATTERIES. THE DISTRIBUTOR/USER IS RESPONSIBLE FOR ROUTINE DISPOSITION OF SPENT OR DAMAGED BATTERIES.

========== MSDS Transport Information ==========

Transport Information:SEALED LEAD ACID BATTERY IS NOT A US DOT

HAZARDOUS MATERIAL. UNDER DANGEROUS GOODS REGULATIONS, 38TH EDITION, EFFECTIVE JANUARY 1, 1997, PRODUCED BY INTERNATIONAL AIR TRANSPORTATION ASSOCIATION (IATA) : OPTIMA BATTERIES ARE CLASSIFIED AS NON-REGULATED BY SPECIAL PROVISIONS A-48 AND A-67 FOR UN2800. UNDER 49 CFR, MARCH 1, 1998 EDITION, OPTIMA BATTERIES ARE CLASSIFIED AS AN EXCEPTION FROM ALL OTHER R EQUIREMENTS OR CONDITIONS AS STATED IN: BATTERIES WET, 173.159 (D)(3(I)[VIBRATION TEST], & (D)(3)(II)[PRES
SURE DIFFERENTIAL TEST]. THESE CONDITIONS HAVE BEEN TESTED & CERTIFIED.

========== Regulatory Information ==========

SARA Title III Information:NONE STATED BY MANUFACTURER.
Federal Regulatory Information:ACCORDING TO THE OSHA HAZARD COMMUNICATION STANDARD, SEALED LEAD ACID BATTERY IN ITS MANUFACTURED AND SUPPLIED STATE IS CONSIDERED NON-HAZARDOUS.
State Regulatory Information:NONE STATED BY MANUFACTURER.

========== Other Information =========
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rticular situation.