Material Safety Data Sheet

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ACDELCO BATTERY, WET, FILLED WITH ACID
*Infosafe No.* 1EVJ7 *Issue Date*
                                       December 2006 *Status* DRAFT by
ACDELCOG
*Classified as hazardous*
      1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING
    ______
*Product Name* ACDELCO BATTERY, WET, FILLED WITH ACID
*Product Code*
*Product Use*
               LEAD/ ACID STORAGE BATTERY
*Company Name* ACDELCO, GM HOLDEN LTD
*Address*
               99 Princess Hwy, Dandenong South Dandenong South
VIC 3175
*Emergency Tel.*
                       03 97977340 or 03 97977341 (between 9am-5pm)
*Other Names* *Name* *Product Code*
       BATTERY, WET, FILLED WITH ACID
       2. COMPOSITION/INFORMATION ON INGREDIENTS
*Information on Composition* BATTERY CONTAINER: POLYPROPYLENE
*Ingredients *
                      *Name *
                                      *CAS * *Proportion * ** **
       LEAD/LEAD OXIDE
                              7438-92-1
                                               60-100 %
       SULFURIC ACID 7664-93-9 10-30 %
ANTIMONY ALLOY 7440-36-0 0-10 %
       ANTIMONY ALLOY 7440-36-0
                                       0-0.09 \%
*Substance Chemical Family* CHEMICAL FAMILY: TOXIC AND CORROSIVE MATERIAL
*Dangerous Components / Constituents* FORMULA : LEAD/ ACID
     HAZARDS IDENTIFICATION
Danger of cumulative effects.
Causes severe burns.
Possible risk of impaired fertility.
May cause harm to the unborn child
Harmful by inhalation and if swallowed.
*Reproductive Toxicity*
                              ACCORDING TO NOHSC THIS PRODUCT IS A CATEGORY 1
REPRODUCTIVE HAZARD, MAY CAUSE HARM TO THE UNBORN CHILD. POSSIBLE RISK
OF IMPARED FERTILITY.
*Chronic Effects*
                       DANGER OF CUMULATIVE EFFECTS.
*Inhalation* HARMFUL VIA INHALATION. INHALATION OF MISTS OR VAPOURS WILL RESULT IN RESPIRATORY IRRITATION AND POSSIBLE HARMFUL CORROSIVE
EFFECTS INCLUDING LESIONS OF THE NASAL SEPTUM, PULMONARY EDEMA,
PNEUMONITIS AND EMPHYSEMA.
*Ingestion*
             HARMFUL IF SWALLOWED. INGESTION OF THIS PRODUCT MAY CAUSE
NAUŠEA, VOMITING, ABDOMINAL PAIN AND CHEMICAL BURNS TO THE MOUTH, THROAT
AND STOMACH.
*Skin* SKIN CONTACT WILL CAUSE REDNESS, ITCHING, IRRITATION, SEVERE
PAIN AND CHEMICAL BURNS WITH RESULTANT TISSUE DESTRUCTION.
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\*Eye\* EYE CONTACT WILL CAUSE STINGING, BLURRING, TEARING, SEVERE PAIN AND POSSIBLE PERMANANENT CORNEAL DAMAGE.

#### 4. FIRST AID MEASURES

SEEK MEDICAL ATTENTION FOR ALL EXPOSURE EMERGENCIES. \*Inhalation\* IF INHALED, REMOVE FROM CONTAMINATED AREA. APPLY ARTIFICIAL RESPIRATION IF NOT BREATHING. SEEK IMMEDIATE MEDICAL ATTENTION. \*Ingestion\* DO NOT INDUCE VOMITING, WASH OUT MOUTH WITH WATER. SEEK IMMÉDIATE MEDICAL ATTENTION.

\*Skin\* WASH AFFECTED AREA THROUGHLY WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING AND WASH BEFORE REUSE OR DISCARD. SEEK MEDICAL

\*Eye\* IF CONTACT WITH THE EYE(S) OCCURS, WASH WITH COPIOUS AMOUNTS OF WATER HOLDING EYELID(S) OPEN. TAKE CARE NOT TO RINSE CONTAMINATED WATER INTO THE NON-AFFECTED EYE. SEEK IMMEDIATE MEDICAL ATTENTION. \*First Aid Facilities\* EYE WASH, SAFETY SHOWER AND GENERAL WASHROOM FACILITIES.

\*Advice to Doctor\* TREAT SYMPTOMATICALLY. -----

## FIRE FIGHTING MEASURES

\*Extinguishing Media\* HALON OR DRY CHEMICAL EXTINGUISHER.
\*Specific Hazards\* UNUSUAL FIRE AND EXPLOSION HAZARDS: HYDROGEN GAS AND

SULFURIC ACID VAPORS ARE GENERATED UPON OVERCHARGE, VENTILATE CHARGING

\*Hazardous Combustion Products\* UNDER FIRE CONDITIONS THIS PRODUCT MAY EMITT TOXIC AND/OR IRRITATING FUMES.

\*Flash Point\* NOT AVAILABLE.

\*Flammable Limits UEL\* 74.2 \*Flammable Limits LEL\* 4.0

#### 6. ACCIDENTAL RELEASE MEASURES

\*\* IF MATERIAL IS RELEASED OR SPILLED, TAKE THE FOLLOWING ACTIONS: WEAR FULL PROTECTIVE CLOTHING AND BREATHING APPARATUS. AVOID ANY EXPOSURE. CONTAIN SPILLED MATERIAL WITH INERT NON COMBUSTIBLE MATERIAL AND COLLECT IN A SUITABLE LABELLED CONTAINER. SEAL ALL WASTES IN A VAPOUR TIGHT LABELLED CORROSION RESISTANT CONTAINER FOR EVENTUAL DISPOSAL. IF THIS MATERIAL ENTERS THE WATERWAYS CONTACT THE ENVIRONMENTAL PROTECTION AUTHORITY, OR YOUR LOCAL WASTE MANAGEMENT AUTHORITY.

#### 7. HANDLING AND STORAGE

\*Handling\* AVWHEN HANDLING AND STORING, KEEP AWAY FROM FLAMES DURING AND IMMEDIATELY AFTER CHARGING. AVOID PROLONGED OVERCHARGING. LIFT WITH BATTERY CARRYING DEVICE AND DO NOT EXCESSIVELY TILT BATTERY. IT IS ESSENTIAL THAT ALL WHO COME INTO CONTACT WITH THIS MATERIAL MAINTAIN HIGH STANDARDS OF PERSONAL HYGIENE IE. WASHING HANDS PRIOR TO EATING, DRINKING AND SMOKING.

\*Storage\* STORE IN A COOL, DRY WELL VENTILATED AREA AWAY FROM HEAT AND OUT OF DIRECT SUNLIGHT. KEEP SECURELY SEALED AND PROTECTED AGAINST PHYSICAL DAMAGE. INSPECT REGULARLY FOR DEFICIENCIES SUCH AS DAMAGE OR LEAKS.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

\* \*Name \* \*National Exposure Standards \*STEL (mgm3) \* \*STEL \*TWA (mgm3) \* \*TWA (ppm) \* \*FootNote \* (mgg) \* LEAD/LEAD OXIDE SULFURIC ACID 3 ANTIMONY ALLOY -0.15 1 0.5

\*Other Exposure Information\* NO EXPOSURE STANDARDS HAVE BEEN ESTABLISHED FOR THIS MATERIAL BY THE NATIONAL OCCUPATIONAL HEALTH AND SAFETY COMMISSION (NOHSC). HOWEVER, EXPOSURE STANDARDS FOR INGREDIENTS

### ARE STATED ABOVE:

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AS PUBLISHED BY THE NATIONAL OCCUPATIONAL HEALTH AND SAFETY COMMISSION
(NOHSC):
TWA - THE TIME-WEIGHTED AVERAGE AIRBORNE CONCENTRATION OVER AN
EIGHT-HOUR WORKING DAY, FOR A FIVE-DAY WORKING WEEK OVER AN ENTIRE
WORKING LIFE.
STEL (SHORT TERM EXPOSURE LIMIT) - THE AVERAGE AIRBORNE CONCENTRATION
OVER A 15 MINUTE PERIOD WHICH SHOULD NOT BE EXCEEDED AT ANY TIME DURING
A NORMAL EIGHT-HOUR WORKDAY.
ACCORDING TO CURRENT KNOWLEDGE THESE CONCENTRATIONS SHOULD NEITHER
IMPAIR THE HEALTH OF, NOR CAUSE UNDUE DISCOMFORT TO, NEARLY ALL WORKERS.
*Respiratory Protection*
                                IF ENGINEERING CONTROLS ARE NOT EFFECTIVE IN
CONTROLLING AIRBORNE EXPOSURE THE RESPIRATORY PROTECTIVE EQUIPMENT SUCH
AS HALF MASK RESPIRATOR WITH ACID MIST FILTERS ARE RECOMMENDED.
REFERENCE SHOULD BE MADE TO AUSTRALIAN STANDARDS AS/NZS 1715, SELECTION,
USE AND MAINTANENCE OR RESPIRATORY PROTECTIVE DEVICES AND AS/NZS 1716,
RESPIRATORY PROTECTIVE DEVICES.
*Eve Protection*
                            SAFETY GLASSES WITH SIDE SHIELDS, GOGGLES OR FULL-FACE
SHIELD AS APPROPRIATE RECOMMENDED. FINAL CHOICE OF APPROPRIATE EYE/FACE
PROTECTION WILL VARY ACCORDING TO INDIVIDUAL CIRCUMSTANCES I.E. METHODS
OF HANDLING OR ENGINEERING CONTROLS AND ACCORDING TO RISK ASSESSMENTS
UNDERTAKEN. EYE PROTECTION SHOULD CONFORM WITH AUSTRALIAN/NEW ZEALAND
STANDARD AS/NZS 1337 - EYE PROTECTORS FOR INDUSTRIAL APPLICATIONS.
*Hand Protection* WEAR GLOVES OF IMPERVIOUS MATERIAL. FINAL CHOICE OF
APPROPRIATE GLOVES WILL VARY ACCORDING TO INDIVIDUAL CIRCUMSTANCES I.E.
METHODS OF HANDLING OR ACCORDING TO RISK ASSESSMENTS UNDERTAKEN.
REFERENCE SHOULD BE MADE TO AS/NZS 2161.1: OCCUPATIONAL PROTECTIVE
GLOVES - SELECTION, USE AND MAINTENANCE.
                             WEAR PROTECTIVE OVERALLS AND CHEMICAL RESISTANT APRON
*Body Protection*
WHERE CLOTHING IS LIKELY TO BE CONTAMINATED.
*Eng. Controls* LOCAL EXHAUST VENTILATION PREFERRED. MECHANICAL ACCEPTABLE AT 1 TO 4 CHANGES/ PER/ HOUR
*Biological Limit Values* NO BIOLOGICAL LIMIT ALLOCATED.
                      9. PHYSICAL AND CHEMICAL PROPERTIES
        -----
*Appearance* CLEAR LIQUID.
*Odour*
                 PUNGENT ODOUR (SHARP PENETRATING ODOUR)
*Melting Point*
                              NOT AVAILABLE.
*Boiling Point* 95°C

*Solubility in Water* 100%

*Specific Gravity (H2O=1)* NOT AVAILABLE.

*Vapour Pressure* NOT AVAILABLE.
                                       NOT AVAILABLE.
*Vapour Density (Air=1)*
                                       LESS THAN 1
*Evaporation Rate* -1
*Volatile Component* 10-30%
*Flash Point* NOT AVAILABLE.
*Flammable Limits LEL* 4.0
*Flammable Limits UEL* 74.2
      10. STABILITY AND REACTIVITY
 *Stability* U-3, F-0, S-2 R-W UNSTABLE.
*Hazardous Polymerization* WILL NOT OCCUR.
*Materials to Avoid* WATER.
*Hazardous Decomposition Products* NOT AVAILABLE.
*Hazardous Reaction*
                             CONTACT WITH WATER MAY CAUSE ELECTRIC SHOCK AND
REACTION.
*Conditions to Avoid* AVOID OVERCHARGING AND SMOKING IN THE VICINITY OF
CHARGING BATTERIES, AVOID SPARKS, POOR VENTILATION.
         11. TOXICOLOGICAL INFORMATION
*Toxicology Information* NO TOXICOLOGICAL DATA AVAILABLE FOR THIS PRODUCT.
*Inhalation*
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\*Inhalation\* HARMFUL VIA INHALATION. INHALATION OF MISTS OR VAPOURS WILL RESULT IN RESPIRATORY IRRITATION AND POSSIBLE HARMFUL CORROSIVE EFFECTS INCLUDING LESIONS OF THE NASAL SEPTUM, PULMONARY EDEMA,

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PAIN AND CHEMICAL BURNS WITH RESULTANT TISSUE DESTRUCTION.
*Eye* EYE CONTACT WILL CAUSE STINGING, BLURRING, TEARING, SEVERE PAIN AND POSSIBLE PERMANANENT CORNEAL DAMAGE.
*Chronic Effects* DANGER OF CUMULATIVE EFFECTS.
*Reproductive Toxicity* ACCORDING TO NOHSC THIS PRODUCT IS A CATEGORY 1
REPRODUCTIVE HAZARD, MAY CAUSE HARM TO THE UNBORN CHILD. POSSIBLE RISK
OF IMPARED FERTILITY.
             ......
        12. ECOLOGICAL INFORMATION
*Environment Protection*
                                     DO NOT ALLOW TO ENTER WATERWAYS.
*Mobility* NOT AVAILABLE.
*Persistence / Degradability* NOT AVAILABLE.
*Ecotoxicity* NO ECOLOGICAL DATA AVAILABLE.
        13. DISPOSAL CONSIDERATIONS
_____
     DISPOSE OF WASTE ACCORDING TO FEDERAL, EPA, STATE AND LOCAL REGULATIONS.
_________
         14. TRANSPORT INFORMATION
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THIS MATERIAL IS CLASSIFIED AS A CLASS 8 (CORROSIVE) DANGEROUS GOOD ACCORDING TO THE AUSTRALIAN CODE FOR THE TRANSPORT OF DANGEROUS GOODS BY ROAD AND RAIL. DANGEROUS GOODS OF CLASS 8 (CORROSIVE) ARE INCOMPATIBLE
IN A PLACARD LOAD WITH ANY OF THE FOLLOWING:
- CLASS 1, EXPLOSIVE
- CLASS 4.3, DANGEROUS WHEN WET SUBSTANCE
- CLASS 5.1, OXIDISING AGENT
- CLASS 5.2, ORGANIC PEROXIDE
- CLASS 6, TOXIC AND INFECTIOUS SUBSTANCES, IF THE CLASS 6 DANGEROUS GOODS ARE CYANIDES AND THE CLASS 8 DANGEROUS GOODS ARE ACIDS
- CLASS 7, RADIOACTIVE SUBSTANCE
AND ARE INCOMPATIBLE WITH FOOD AND FOOD PACKAGING IN ANY QUANTITY.
*U.N. Number* 2794
*Proper Shipping Name* BATTERIES, WET, FILLED WITH ACID
*DG Class*
*Packaging Method*
*Packing Group*
                            III
*EPG Number*
                  8A1
*IERG Number* 37
       15. REGULATORY INFORMATION
*Risk Phrase*
R33 Danger of cumulative effects.
R35 Causes severe burns.
R62 Possible risk of impaired fertility.
R61(1) May cause harm to the unborn child
R20/22 Harmful by inhalation and if swallowed.
*Safety Phrase* S23 Do not breathe gas/fumes/vapour/spray
S27 Take off immediately all contaminated clothing.
$36/37/39 Wear suitable protective clothing, gloves and eye/face
protection.
*Poisons Schedule* Not Scheduled
*Hazard Category* Toxic,Corrosive
    _____
   16. OTHER INFORMATION
*User Codes * *_User Title Label_*
                                               *_User Code_*
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Approval Number 5124

\*SDS History\* MSDS Reviewed: December 2006
\*Poisons Schedule\* Not Scheduled
\*Hazard Category\* Toxic,Corrosive
\*\* ACDelco Part # Battery Type

NS40ZWC Wet Calcium

NS40ZWC Wet Calcium NS40ZLWC Wet Calcium NS40ZLSWC Wet Calcium NS40ZSWC Wet Calcium 22F54WC Wet Calcium 22FR54WC Wet Calcium 22F66WC Wet Calcium 22FR66WC Wet Calcium 55D23LWC Wet Calcium 55D23RWC Wet Calcium AU2266WC Wet Calcium AU22R66WC Wet Calcium NS70WC Wet Calcium NS70LWC Wet Calcium NX1105WC Wet Calcium NX1105LWC Wet Calcium NX1207WC Wet Calcium NX1207LWC Wet Calcium 55457WC Wet Calcium 56330WC Wet Calcium 56318WC Wet Calcium 58827WC Wet Calcium N38-54WC Wet Calcium N38L-54DFWC Wet Calcium 12N243WC Wet Calcium 12N244WC Wet Calcium 30HL102WC Wet Calcium 30H102WC Wet Calcium N120WC Wet Calcium N150WC Wet Calcium N200WC Wet Calcium SN200L SMF SN200 SMF SN150L SMF SN150 SMF SN120L SMF SN120 SMF SN100L SMF SN100 SMF S95D31RHD SMF S95D31R SMF S95D31LHD SMF S95D31L SMF S85B60R SMF S85B60L SMF S80D26R SMF S80D26L SMF S78DT6MF SMF S786MF SMF S75D31R SMF S75D31L SMF S756MF SMF S755MF SMF S70D23R SMF S70D23L SMF S65D31R SMF S65D31L SMF S657MF SMF S656MF SMF S59218 SMF S58R6MF SMF

S58828 SMF

S58827 SMF S586MF SMF S58515 SMF S56821 SMF S56820 SMF S56640 SMF S56639 SMF S56638 SMF S56330 SMF S56323 SMF S56318 SMF S55D26R SMF S55D26L SMF S55D23R SMF S55D23L SMF S55B24RS SMF S55B24R SMF S55B24LS SMF S55B24L SMF S55565 SMF S55559 SMF S55523 SMF S55459 SMF S55458 SMF S55457 SMF S55414 SMF S54519 SMF S54464 SMF S54459 SMF S54317 SMF S54316 SMF \$53529 SMF \$53528 SMF S50D20R SMF S50D20L SMF S48D26R SMF S48D26L SMF S416MF SMF S40B20RSDF SMF S40B20RS SMF S40B20R SMF S40B20LSDF SMF S40B20LS SMF S40B20L SMF S356MF SMF S347MF SMF S346MF SMF S31901MF SMF S31900MF SMF S24R6MF SMF S246MF SMF S115D31R SMF S115D31L SMF S1111HD SMF S1111 SMF S1110HD SMF S1110 SMF M27SMF730 SMF M24SMF600 SMF HCM27SMF SMF HCM27LSMF SMF HCM24SMF SMF HCM24LSMF SMF DCM27SMF SMF DCM27LSMF SMF DCM24SMF SMF DCM24LSMF SMF AU22R530SMF SMF

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