Product ID:17FT-90 LEAD ACID BATTERY MSDS Date:08/16/1996 FSC:6140 NIIN:00-185-6714 MSDS Number: CBRWJ === Responsible Party === Company Name: GNB INC Address:1110 HIGHWAY 110 **City:MENDOTA HEIGHTS** State:MN ZIP:55118 Country:US Info Phone Num:612-681-5000 OR 612-681-5281 Emergency Phone Num:800-424-9300 CHEM TREC Preparer's Name: RICHARD B. CROWELL CAGE:70658 === Contractor Identification === Company Name: GNB INC Address:1110 HIGHWAY 110 Box:City:MENDOTA HEIGHTS State:MN ZIP:55118 Country:US Phone:612-618-5000 CAGE:70658 Company Name: JOINT AND CLUTCH SVC INC. DIV OF MIDWAY Box:UNKNOW CAGE:5P322

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

Ingred Name:LEAD (SARA 313) (CERCLA) CAS:7439-92-1 RTECS #:OF7525000 Fraction by Wt: 27-34% 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: 39-48% Other REC Limits:NONE RECOMMENDED OSHA PEL:0.05 MG/M3 (PB) ACGIH TLV:0.15 MG/M3 (PB)

Ingred Name:SULFURIC ACID (SARA 302/313) (CERCLA) CAS:7664-93-9 RTECS #:WS5600000 Fraction by Wt: 11-23% 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

Ingred Name:POLYPROPYLENE (CAS E) CAS:9003-07-0 RTECS #:TR5000000 Fraction by Wt: 6-10% Other REC Limits:NONE RECOMMENDED

Ingred Name:HARD RUBBER OR BUTADIENE-STYRENE POLYMER (RUBBER) CAS:9003-55-8 RTECS #:WL6478000 Fraction by Wt: 6-10% Other REC Limits:NONE RECOMMENDED

Ingred Name:POLYETHYLENE (MFR GAVE CAS FOR PVC: 9002-86-2) (PLATE SEPARATOR MATERIAL) CAS:9002-88-4 RTECS #:TQ3325000 Fraction by Wt: 1-2% Other REC Limits:NONE RECOMMENDED

LD50 LC50

Mixture:NONE SPECIFIED BY MANUFACTURER. Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO Health Hazards Acute and Chronic:SULFURIC ACID MIST MAY CAUSE RESPIRATORY IRRITATION; EYE IRRITATION. CONTACT WITH SKIN MAY CAUSE SEVERE IRRITATION, BURNS, ULCERATION. INGESTION OF SULFURIC ACID MAY CAUSE SEVERE IRRITATION OF MOUTH, THROAT, ESOPHAGUS & STOMACH; LEAD COMPOUNDS MAY CAUSE SEVERE GI TRACT IRRITATION/SYSTEMIC EFFEC

TS.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1% OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.

Effects of Overexposure:INHALED-SULFURIC ACID MAY CAUSE SEVERE SKIN IRRITATION, BURNS, DAMAGE TO CORNEA & POSSIBLE BLINDNESS, UPPER RESPIRATORY IRRITATION. LEAD COMPOUNDS MAY CAUSE ABDOMINAL PAIN, NAUSEA, HEADACHES, VOMITING, DIARRHEA, SEVERE CRAMPING, DIFFICULTYSLEEPING.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid:IN ALL CASES GET MEDICAL ATTENTION. EYES-FLUSH WITH WATER FOR 15 MINUTES. SKIN-REMOVE CONTAMINATED CLOTHES. WASH WITH MILD SOAP & WATER. INHALED-REMOVE TO FRESH AIR. ADMINISTER OXYGEN OR ARTIFICIAL RE SPIRATION AS NEEDED. INGESTED-DO NOT INDUCE VOMITING! IF CONSCIOUS, GIVE LOTS OF WATER.

Lower Limits:4.65 (H2) Upper Limits:93.9 (H 2) Extinguishing Media:CARBON DIOXIDE, DRY CHEMICAL, FOAM. Fire Fighting Procedures:IF BATTERIES ON CHARGE; TURN OFF POWER. USE POSITIVE PRESSURE, SELF-CONTAINED BREATHING APPARATUS. WEAR ACID RESISTANT CLOTHING.

Unusual Fire/Explosion Hazard: HYDROGEN & OXYGEN GASES ARE GENERATED DURING NORMAL BATTERY OPERATIONS.

Spill Release Procedures: ELIMINATE ALL SOURCES OF IGNITION AND COMBUSTIBLE MATERIALS. STOP FLOW AND

CONTAIN SPILL. NEUTRALIZE WITH SODA LIME OR QUICK LIME. SCOOP UP AND PLACE IN A CONTAINER FOR LATER DISPOSAL. DISPOSE OF AS H AZARDOUS WASTE. Neutralizing Agent:SODA ASH OR QUICK LIME.

Handling and Storage Precautions:STORE IN A COOL, DRY PLACE. AVOID PHYSICAL DAMAGE. MAKE CERTAIN VENT CAPS ARE ON TIGHTLY. USE BATTERY CARRIER TO LIFT BATTERY.

Other Precautions:DO NOT ALLOW METALLIC MATERIALS TO SIMULTANEOUSLY CONTACT BOTH THE POSITIVE TERMINALS OF THE BATTERIES. AVOID CONTACT WITH INTERNAL COMPONENTS OF THE BATTERIES.

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

Respiratory Protection: NONE NORMALLY REQUIRED. IF ENGINEERING CONTROLS FAIL OR NON-ROUTINE USE OR AN EMERGENCY OCCURS; WEAR AN MSHA/NIOSH APPROVED RESPIRATOR WITH ACID MIST CARTRIDGE OR AN AIR-SUPPLIED RESPIRATOR OR SCBA, A S REQUIRED. USE IAW 29 CFR 1910.134. Ventilation: STORE AND HANDLE LEAD ACID **BATTERIES IN WELL-VENTILATED** AREAS. Protective Gloves: PVC, NEOPRENE, RUBBER. Eye Protection: CHEMICAL SPLASH GOGGLES & FACESHIELD. Other Protective Equipment: ACID RESITANT APRON. IMPERVIOUS CLOTHING IF SEVERE CONTACT HAZARD WITH ACID EXISTS. EYE WASH & EMERGENCY DELUGE SHOWER. Work Hygienic Practices: WASH HANDS AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHES BEFORE REUSE. Supplemental Safety and Health NOTE: PHYSICAL CHARACTERISTICS ARE FOR TH E SULFURIC ACID ELECTROLYTE. 

HCC:N1 Boiling Pt:B.P. Text:229F,109C Vapor Pres:10 Vapor Density:>1 Spec Gravity:1.23 Evaporation Rate & amp; Reference: