

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

Product ID:FLOODED LEAD-CALCIUM BATTERY

MSDS Date:07/01/1994

FSC:6140

NIIN:01-122-7652

MSDS Number: BYCBG

=== Responsible Party ===

Company Name:C & D CHARTER POWER SYSTEMS INC

Address:3043 WALTON RD STE B

City:PLYMOUTH MEETING

State:PA

ZIP:19462

Country:US

Info Phone Num:215-828-9000

Emergency Phone Num:215-828-9000

Preparer's Name:P. J. REIC

H

CAGE:80531

=== Contractor Identification ===

Company Name:C & D CHARTER POWER SYSTEMS, INC.

Address:3043 WALTON ROAD

City:PLYMOUTH MEETING

State:PA

ZIP:19462

Country:US

Phone:800-255-3924

CAGE:80531

Company Name:C AND D CHARTER POWER SYSTEMS, INC.

Address:1400 UNION MEETING ROAD

Box:3053

City:BLUE BELL

State:PA

ZIP:19422

Country:US

Phone:215-619-2700; 610-828-9309

CAGE:0GRM9

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

Ingred Name:LEAD

CAS:7439-92-1

RTECS #:OF7525000

Fraction by Wt: 62-65%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:0.05 MG/M3  
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  
Fraction by Wt: 6-8%  
Other REC Limits:NONE RECOMMENDED  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

Ingred Name:WATER  
CAS:7732-18-5  
RTECS #:ZC0110000  
Fraction by Wt: 12-15%  
Other REC Limits:NONE RECOMMENDED

Ingred Name:CALCIUM  
CAS:7440-70-2  
RTECS #:EV8040000  
Fraction by Wt: 1%  
Other REC Limits:NONE RECOMMENDE  
D

Ingred Name:INERT COMPONENTS  
Fraction by Wt: 10-18%  
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 2140 MG/KG  
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:ACUTE: TISSUE DESTRUCTION ON CONTACT.  
MAY CAUSE 2ND AND 3RD DEGREE BURNS. BLINDESS. INGESTION WILL CAUSE  
CORROSIVE BURNS ON CONTACT. MAY BE F

ATAL IF SWALLOWED. CHRONIC:

INHALATION OF MIST MAY CAUSE UP PER RESPIRATORY IRRITATION & PULMONARY EDEMA.

Explanation of Carcinogenicity:NONE

Effects of Overexposure:IRRITATION OR BURNING OF EXPOSED TISSUES.

Medical Cond Aggravated by Exposure:RESPIRATORY DISORDERS.

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

First Aid:SKIN OR EYES: REMOVE CONTAMINATED CLOTHING. FLUSH WITH WATER FOR 15 MINUTES. IF IRRITATION CONTINUES, SEEK MEDICAL ATTENTION.

INGESTIONS

: DON'T INDUCE VOMITING. DRINK LARGE AMOUNTS OF MILK OR WATER. S EEK MEDICAL ATTENTION IMMEDIATELY.

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

Extinguishing Media:DRY CHEMICAL, HALON, CARBON DIOXIDE.

Fire Fighting Procedures:VENTILATE THE AREA WELL. SELF-CONTAINED BREATHING APPARATUS (SCBA) RECOMMENDED & FULL PROTECTIVE CLOTHES.

Unusual Fire/Explosion Hazard:HYDROGEN GAS AND ACID MIST ARE GENERATED UPON OVERCHARGE OR IN FIRES. VENTILATE AREA. THOROUGHLY.

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

Spill Release Procedures:NEUTRALIZE SPILL WITH SODA ASH OR SODIUM BICARBONATE. PH SHOULD BE BETWEEN 6-9. KEEP UNTRAINED INDIVIDUALS AWAY. PLACE THE BROKEN BATTERY IN A HEAVY GAUGE PLASTIC BAG OR OTHER NON-METALLIC CONTAINER. PROVIDE ADEQUATE VENTILATION.

Neutralizing Agent:SODA ASH OR SODIUM BICARBONATE.

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

Handling and Storage Precautions:STORE IN COOL, DRY AREA AWAY FROM

COMBUSTIBLES. DO NOT STORE IN SEALED, UNVENTILATED AREAS.

Other Precautions:DO NOT USE ORAGANIC SOLVENTS OR OTHER THAN RECOMMENDED CHEMICALS CLEANERS ON THE BATTERIES.

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

Respiratory Protection:IF NECESSARY, NIOSH APPROVED ACID MIST RESPIRATOR.

Ventilation:GENERAL ROOM VENTILATION IS SUFFICIENT DURING NORMAL USE AND HANDLING. RECOMMENDED 2-3 ROOM AIR CHANGES PER HOUR.

Protective Gloves:RUB

BER OR NEOPRENE GLOVES.

Eye Protection:CHEMICAL SPALSH GOGGLES/SAFETY GLASSES.

Other Protective Equipment:ACID RESISTANT APRON OR CLOTHING.

Work Hygienic Practices:MAINTAIN AN EYEWASH, FIRE EXTINGUISHER AND  
EMERGENCY COMMUNICATIVE DEVICE IN THE AREA.

Supplemental Safety and Health

DO NOT WEAR CONDUCTIVE METAL JEWELRY WHEN WORKING WITH BATTERIES. USE  
NON-CONDUCTIVE TOOLS ONLY. DISCHARGE STATIC ELECTRICITY PRIOR TO  
WORKING ON A BATTERY.

===== Physical/Chemical Properties

=====

HCC:C1

Boiling Pt:B.P. Text:235F,113C

Vapor Pres:1 MM

Vapor Density: