SAFT AMERICA INC. TRANSPORTATION DIV. -- NICKEL-CADMIUM BATTERY, VENTED BB 433A/A -- 6140-01-046-1116

Product ID:NICKEL-CADMIUM BATTERY, VENTED BB 433A/A MSDS Date:08/03/1993 FSC:6140 NIIN:01-046-1116 **MSDS Number: BRZYS** === Responsible Party === Company Name: SAFT AMERICA INC. TRANSPORTATION DIV. Address:711 INDUSTRIAL BLVD Box:1886 City:VALDOSTA State:GA ZIP:31603 Country:US Info Phone Num:912-247-2331 **Emergency Phone Num:912** -247-2331 Preparer's Name: CECOM SAFETY OFFICE CAGE:09052 === Contractor Identification === Company Name:SAFT AMERICA INC. Address:711 INDUSTRIAL BLVD Box:1886 City:VALDOSTA State:GA ZIP:31602 Country:US Phone:912-247-2331 CAGE:09052

Ingred Name:CADMIUM (SARA III) CADMIUM & CADMIUM HYDROXIDE 14-15% CAS:7440-43-9 RTECS #:EU9800000 Fraction by Wt: 14-15% Other REC Limits:NONE RECOMMENDED OSHA PEL:SEE 1910.1027 ACGIH TLV:0.01 MG/ M3 DUST;9394 EPA Rpt Qty:10 LBS DOT Rpt Qty:10 LBS

Ingred Name:CADMIUM HYDROXIDE CADMIUM & CADMIUM HYDROXIDE 14-15% CAS:21041-95-2 Other REC Limits:NONE RECOMMENDED OSHA PEL:0.1 MG/M3 (CD FUME) ACGIH TLV:0.05 MG/M3 (CD FUME)

Ingred Name:NICKEL (SARA III) NICKEL AND NICKEL HYDROXIDE 26% CAS:7440-02-0 RTECS #:QR5950000 Fraction by Wt: 26% Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:1 MG/M3; 9293

Ingred Name:NICKEL HYDROXIDE (SARA III) NICKEL & NICKEL HYDROXIDE 26% CAS:12054-48-7 RTECS #:QR7040000 Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG NI/M3 ACGIH TLV:0.1 MG NI/M3; 9293 EPA Rpt Qty:10 LBS DOT Rpt Qty:10 LBS

Ingred Name:POTASSIUM HYDROXIDE (SARA III) CAS:1310-58-3 RTECS #:TT2100000 Fraction by Wt: 6.5% Other REC Limits:NONE RECOMMENDED OSHA PEL:C, 2 MG/M3 ACGIH TLV:C 2 MG/M3; 9293 EPA Rpt Qty:1000 LBS DOT Rpt Qty:1000 LBS

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER. Routes of Entry: In halation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO Health Hazards Acute and Chronic: INTACT BATTERIES PRESENT NO SPECIFIC HAZARDS. BURNING BATTERIES MAY EMIT TOXIC FUMES. LEAKING BATTERIES LEAK CORROSIVE MATERIAL IRRITATING TO SKIN, EYES AND MUCOUS **MEMBRANES** Explanation of Carcinogenicity:CD, NI, ARE NTP SUSPECT CARCINOGENS. CD IS IARC CARCINOGEN. Effects of Overexposure: ELECTROLYTE EXPOSURE TO SKIN/EYES WILL CAUSE SEVERE IRRITATION. INHALATION OF FUMES MAY CAUSE SEVERE RESPIRATORY IRRITATION. Medical Cond Aggravated by Exposure: RESPIRATORY ALIMENTS- W/BURNING **BATTERIES SKIN CONDITIONS- W/ LEAKING BATTERIES** First Aid: IF BATTERY CONTENTS COME IN CONTACT WITH THE BODY WASH AFFECTED AREA FOR AT LEAST 15 MINUTES WITH CLEAN WATER.DO NOT ATTEMPT TO NEUTRALIZE. SEEK MEDICAL ATTENTION PROMPTLY. ====== Fire Fighting Measures ==== _____ Extinguishing Media: CARBON DIOXIDE OR DRY CHEMICAL FIRE EXTINGUISHER, 10- B:C Fire Fighting Procedures: FIRE FIGHTERS SHOULD USE SELF CONTAINED BREATHING APPARATUS. BATTERY/CELLS MAY RELEASE TOXIC FUMES, IF SUBJECT TO FIRE/EXTREME HEAT. Unusual Fire/Explosion Hazard:STRONG OXIDERIZERS (E.G., ACIDS) AND FIRE. Spill Release Procedures: SPILL OR LEAK PROCEDURES (PRECAUTIONS FOR SAFE HANDLING & USE) AVOID SKIN OR EYE CONTACT. USE NON FLAMMABLE ABSORBENT MATERIAL FOR CLEAN-UP. COORDINATE WITH INSTALLATION SAFETY AND ENVIRONMENTAL OFFIC ES. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling and Storage Precautions:DO NOT ABUSE OR SHORT CIRCUIT. STORE COOL, DRY AND IN A WELL VENT AREA. SEPARATE FROM OTHER HAZARDOUS MATERIALS. AREA APPROVED BY LOCAL FIRE DEPARTM Other Precautions:DO NOT INVERT BATTER

Y OR CAUSE TO SPILL. RECHARGE IAW METHODS SPECIFIED IN APPLICIABLE TECHNICAL MANUAL. DO NOT OVERCHARGE. Respiratory Protection: IF BATTERIES ARE BURNING USE SCBA Ventilation: CONTACT LOCAL SAFETY/INDUSTRIAL HYGIENE OFFICE TO DETERMINE IF LOCAL EXHAUST VENTILATION IS NEEDED Protective Gloves: CHEMICAL RESISTANT GLOVES Eye Protection: CHEMICAL SAFETY GLASSES/GOGGLES Other Protective Equipment: CHEMICAL RESISTANT APRON W ork Hygienic Practices: AVOID SKIN EYE CONTACT WITH ELECTROLYTE. DO NOT EAT OR SMOKE IN BATTERY SERVICE AREA. Supplemental Safety and Health CONTRACT # DAAB07-89-B-C075. THIS MSDS WAS CODED FROM A CECOM MATERIAL SAFETY DATA SHEET NOT THE MANUFACTUERS. CECOM SAFETY OFFICE, FT MONMOUTH, NJ 07703-5024 AUTOVON 995-3112.**AMMENDED ON 05FEB97(FP -D):ADDED MGR, HCC AND SPEC NUMBER; CHANGED ITEM NAME TO CORRESPOND TO DLSC** ===== HCC:Z5 pH:UNK Appearance and Odor:NICKEL-CADMIUM BATTERY, VENTED Percent Volatiles by Volume:UNK Corrosion Rate:UNK Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS (E.G., ACIDS). STORE SEPARATELY FROM OTHER HAZARDOUS MATERIALS Stability Condition to Avoid: FIRE AND EXTREME HEAT. DO NOT SHORT CIRCUIT OR OVERCHARGE

Hazardous Decomposition Products:WHEN EXPOSED TO FIRE OR EXTREME HEAT, BATTERI

ES MAY EMIT TOXIC FUMES

Waste Disposal Methods:DISPOSAL MUST BE IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. COORDINATE WITH SUPPORTING INSTALLATION AND/OR MACOM ENVIRONMENTAL OFFICE PRIOR TO DISPOSAL

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