MATERIAL SAFETY DATA SHEET

For R&D use only. Not for drug, household or other uses.

Click http://www.lookchem.com/cas-744/7446-14-2.html for suppliers of this product.

Composition/Information on Ingredient

Cas:
7446-14-2
Code:
M

RTECS:
OG4375000
Code:
M

Name:
LEAD SULFATE (SARA III)

Other REC Limits:
NONE SPECIFIED

OSHA PEL:
.05MG PB/M31910.1025
Code:
M

OSHA STEL:

Code:

ACGIH TLV:
0.15 MG PB/M3; 9293
Code:
M

ACGIHSTEL:
N/P
Code:

Control Measures

Respiratory Protection:
NONE UNDER NORMAL CONDITIONS. HEPA RESPIRATOR SHOULD BE WORN DURING BATTERY RECLAIM OPERATIONS. IF THE OSHA PEL IS EXCEEDED.

Ventilation:
WHEN PEL IS EXCEEDED LOCAL EXHAUST IS PREFERRED. USE ADEQUATE VENTILATION TO MAINTAIN EXPOSURE BELOW PEL.

Protective Gloves:
RUBBER GLOVES.

Eye Protection:
CHEMICAL SAFETY GOGGLES/FACE SHIELD.

Other Protective Equipment:
Equipment PROTECTIVE EQUIPMENT MUST BE WORN IF BATTERY IS CRACKED OR OTHERWISE DAMAGED.

Work Hygienic Practices:
WASH AFTER HANDLING AND BEFORE EATING, DRINKING, OR SMOKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.

Supplemental Safety and Health:
N/P

Health Hazards Data

LD50LC50Mixture:
ORAL LD50 (RAT) IS UNKNOWN

Route Of Entry Inds - Inhalation:
YES

Skin:
YES

Ingestion:
YES

Carcinogenicity Inds - NTP:
NO

IARC:
YES

OSHA:
NO

Health Hazards Acute And Chronic:
2 SULFURIC ACID IS A STRONG CORROSIVE. CONTACT CAN CAUSE SEVERE BURNS TO SKIN AND EYES. INGESTION WILL CAUSE GI TRACT BURNS. ACID CAN BE RELEASED IF CASE IS DAMAGED OR IF VENTS ARE TAMPERED WITH. EFFECT S OF LEAD ARE ACCUMULATIVE. IT AFFECTS THE KIDNEYS, REPRODUCTIVE, AND CENTRAL NERVOUS SYSTEM.

Explanation Of Carcinogenicity:
IARC LIST LEAD AS A POSSIBLE CARCINOGEN TO HUMANS FOR WHICHH THERE IS INADEQUATE EVIDENCE.

Signs And Symptions Of Overexposure:
ACID CONTACT MAY CAUSE SEVERE BURNS TO SKIN AND EYES. BREATHING OF MIST MAY PRODUCE NOSE AND THROAT IRRITATION AND RESPIRATORY DIFFICULTY. OVEREXPOSURE TO LEAD AFFECTS KIDNEYS, REPRODUCTIVE AND CNS. S YMPTOMS ARE ANEMIA, VOMITING, HEADACHE,STOMACH PAIN (LEAD COLIC), DIZZINESS, LOSS OF APPETITE, MUSCLE AND JOINT PAIN.

Medical Cond Aggravated By Exposure:
PERSON WITH PRE-EXISTING DISEASE INVOLVING THE EYES, SKIN, OR RESPIRATORY SYSTEM MAY BE AT INCREASED RISK FROM EXPOSURE TO INGREDIENTS IN THE BATTERIES.

First Aid:
EYES: FLUSH WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. FLUSH AREA WITH LARGE AMOUNTS OF WATER. IF SYMPTOMS DEVELOP, GET MEDICAL ATTENTION. INHALATION: MOVE TO FRESH AIR. IF ADVERSE SYMPTOMS DEVELOP, GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING.IF CONSCIOUS,FLUSH MOUTH WITH WATER,GIVE MILK OR SODIUM BICARBONATE SOLUTION.GET MEDICAL ATTENTION.

Spill Release Procedures:
NEUTRALIZE ACID WITH SODIUM BICARBONATE (BAKING SODA), SODIUM CARBONATE (SODA ASH) OR CALCIUM OXIDE (LIME). FLUSH AREA WITH WATER, AND DISCARD TO SEWAGE SYSTEM. DO NOT ALLOW UNNEUTRALIZED ACID INTO SE WAGE SYSTEM.

Neutralizing Agent:
SODIUM BICARBONATE(BAKING SODA), SODIUM CARBONATE(SODA ASH), CALCIUM OXIDE(LIME)

Waste Disposal Methods:
NEUTRALIZED ACID MAY BE FLUSHED DOWN SEWER. SPENT LEAD-ACID BATTERIES MAY BE DISPOSED OF BY SENDING TO A LICENSED SECONDARY LEAD SMELTER FOR RECYCLING. USER MUST FOLLOW "DOT" REGULATIONS FOR TRANSPORT ATION. FOLLOW LOCAL,STATE AND FEDERAL REGULATIONS.

Handling And Storage Precautions:
STORE AWAY FROM REACTIVE MATERIALS, OPEN FLAMES AND SOURCES OF IGNITION. PROHIBIT SMOKING, SPARKS, FLAMES, ETC. FROM BATTERY CHARGING AREA.

Other Precautions:
AVOID MIXING ACID WITH OTHER CHEMICALS. PREVENT SHORT CIRCUITING BATTERY TERMINALS. DO NOT REST TOOLS OR CABLES ON BATTERY. USE INSULATED TOOLS. FOLLOW INSTALLATION INSTRUCTIONS AND DIAGRAMS WHEN INST ALLING OR MAINTAINING BATTERY SYSTEMS.

Fire and Explosion Hazard Information

Flash Point Method:
N/P

Flash Point:

Flash Point Text:
NOT APPLICABLE

Autoignition Temp:

Autoignition Temp Text:
N/A

Lower Limits:
4.0 (H2 GAS)

Upper Limits:
74 (H2 GAS)

Extinguishing Media:
USE "ABC" TYPE FIRE EXTINGUISHER FOR BATTERY FIRES. 3

Fire Fighting Procedures:
WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SELF CONTAINED BREATHING APPARATUS. EVACUATE AREA. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY.

Unusual Fire/Explosion Hazard:
COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS. FLAMMABLE HYDROGEN GAS IS PRODUCED IN THE CELLS, KEEP AWAY IGNITION SOURCES.

Physical/Chemical Properties

HCC:
C1

NRC/State LIC No:
N/R

Net Prop WT For Ammo:

Boiling Point:
=107.2C, 225.F

B.P. Text:
225F(ACID)

Melt/Freeze Pt:

M.P/F.P Text:
N/R

Decomp Temp:

Decomp Text:
UNKNOWN

Vapor Pres:
N/R

Vapor Density:
N/R

Volatile Org Content %:

Spec Gravity:
1.29 ACID

VOC Pounds/Gallon:

PH: <2

VOC Grams/Liter:

Viscosity:
N/P

Evaporation Rate & Reference:
N/R

Solubility in Water:
COMPLETE FOR ACID

Appearance and Odor:
BATTERY CASE 5.4 IN WIDE X 9.25 IN LONG. 6 VOLTS.

Percent Volatiles by Volume:
N/R

Corrosion Rate:
UNKNOWN 4

Reactivity Data

Stability Indicator:
YES

Stability Condition To Avoid:
AVOID SMOKING, SPARKS, FLAMES, ETC. IN BATTERY CHARGING AREA. AVOID SHORT CIRCUITS,AND MIXING ACID WITH OTHER CHEMICALS.

Materials To Avoid:
REACTIVE METALS, STRONG BASES, MOST ORGANIC COMPOUNDS.

Hazardous Decomposition Products:
SULFUR TRIOXIDE, SULFUR DIOXIDE, HYDOGEN SULFIDE, HYDROGEN GAS.

Hazardous Polymerization Indicator:
NO

Conditions To Avoid Polymerization:
WILL NOT POLYMERIZE.

Toxicological Information

Information:N/P

MSDS Transport Information

Information:N/P

Regulatory Information

Sara Title III Information: N/P

Federal Regulatory Information: N/P

State Regulatory Information: N/P

Other Information

Other Information:N/P