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**Common Name:** 

Manufacturer: MSDS Revision Date: MSDS Format:

**Grainger Item Number(s):** 

# **Manufacturer Model Number(s):**

## **MSDS Table of Contents**

Click the desired link below to jump directly to that section in the MSDS

- 1. IDENTIFICATION OF THE PRODUCT AND COMPANY
- 2. HAZARD IDENTIFICATION
- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 4. FIRST AID MEASURES
- 5. FIREFIGHTING MEASURES
- 6. ACCIDENTAL RELEASE MEASURES
- 7. HANDLING AND STORAGE
- 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION
- 9. PHYSICAL AND CHEMICAL PROPERTIES ELECTROLYTE
- 10. STABILITY & REACTIVITY DATA
- 11. IOXICOLOGICAL DATA
- 12. ECOLOGICAL INFORMATION
- 13. DISPOSAL INFORMATION
- 14. TRANSPORT INFORMATION
- 15. REGULATORY INFORMATION
- 16. OTHER INFORMATION

SAFETY DATA SHEET

SEALED MAINTENANCE-FREE LEAD ACID BATTERIES

#### 1. IDENTIFICATION OF THE PRODUCT AND COMPANY

PRODUCT NAME: SEALED MAINTENANCE-FREE LEAD ACI

### PRODUCT CODE:

2UKG8 2UKG9 2UKH1 2UKH2 2UKH3 2UKH4 2UKH5 2UKE 2UKJ3 2UKJ4 2UKJ5 2UKJ6 2UKJ7 2UKJ8 2UKJ9 2UKK 2UKK6 2UKK7 2UKK8 2UKK9 2UKL1 2UKL2 2UKL3 2UKL 5EFE7 5EFE8 5EFE9 5EFF1 5EFF2 5EFF3 5EFF4 5EFE 5EFG0 5EFG1 5EFG2 5EFG3 5EFG4 5EFG5 5EFG6 5EFG 5EFH2 5EFH3 5EFH4 5EFH5 5EFH6 48H470 48H471

## MANUFACTURER:

GRAINGER GLOBAL SOURCING 100 GRAINGER PARKWAY, LAKE FOREST, IL 60045 USA

# EMERGENCY CALL:

1-800-356-2501 (GRAINGER TECHNICAL SUPPORT) 1-800-424-9300, 1-703-527-3887 (NON-US) (IN THE CASE OF POISONING, CONTACT CHEMTREC)

#### 2. HAZARD IDENTIFICATION

# NOTE:

UNDER NORMAL CONDITIONS OF BATTERY USE, INTERN PRESENT A HEALTH HAZARD. THE FOLLOWING INFORMA BATTERY ELECTROLYTE (ACID) AND LEAD FOR EXPOSUBATTERY PRODUCTION OR CONTAINER BREAKAGE OR UNSUCH AS FIRE.

EXCLAMATION MARK
HEALTH HAZARD
FLAME
CORROSION

# ENVIRONMENT

# SIGNAL WORD: DANGER

CATEGORY	GHS CODES	DESCRIPTION
HEALTH:	Н302	HARMFUL IF S
ACUTE TOX. 4 REPR. 1A	Н314	CAUSES SEVER
SKIN CORR. 1A FLAM. GAS 1	Н332	HARMFUL IF I
AQUATIC CHRONIC 1 AQUATIC ACUTE 1	Н360	MAY DAMAGE F
AQUATIC ACULE I	н373	MAY CAUSE DA PROLONGED OF
	H220	EXTREMELY FI
	н410	VERY TOXIC T
	P260	DO NOT BREAT
	P301/330/331	IF SWALLOWED
	P303/361/353	IF ON SKIN ( REMOVE/TAKE CONTAMINATEL WATER/SHOWEF
	P304/340	IF INHALED: REMOVE VICTI REST IN A PC BREATHING.
	P305/351/338	IF IN EYES: RINSE CAUTIC MINUTES. REM PRESENT AND CONTINUE RIN

	P310	IMMEDIATELY DOCTOR/PHYSI
HANDLING:	P210	KEEP AWAY FF FLAMES/HOT S
	P260	DO NOT BREAT
	P264	WASH THOROUG
	P280	WEAR PROTECT CLOTHING/EYE
	P403	STORE IN WEI
	P405	STORE LOCKEI
	P391	COLLECT SPII
	P273	AVOID RELEAS
	P501	DISPOSE OF C ACCORDANCE W INTERNATIONA

## WARNING:

BATTERIES SUBJECTED TO ABUSIVE CHARGING AT EXC PROLONGED PERIODS OF TIME WITHOUT VENT CAPS IN SURROUNDING ATMOSPHERE OF THE OFFENSIVE STRONG CONTAINING SULFURIC ACID.

# REACTIVITY:

ORGANIC MATERIALS, CHLORATES, CARBIDES, FULMIN REACTS VIOLENTLY WITH WATER WITH EVOLUTION OF STRONG OXIDIZERS, HYDROGEN PEROXIDE, ACIDS.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT

CAS NUMBER

INORGANIC COMPOUNDS OF:

LEAD 7439-92-1

ANTIMONY 7440-36-0

LEAD DIOXIDE 1309-60-0

NON-HAZARDOUS INGREDIENT N/A

ELECTROLYTE (SULFURIC ACID) 7664-93-9

#### NOTE:

COMPONENTS ARE FOR A FULLY CHARGED LEAD ACID I ELECTROLYTE (WATER AND SULFURIC ACID SOLUTION) OF EVERY BATTERY MANUFACTURED BY GRAINGER GLOE SUBSIDIARIES. OTHER INGREDIENTS MAY BE PRESENT POLYPROPYLENE IS THE PRINCIPAL CASE MATERIAL C BATTERIES. ELECTROLYTE IN THIS PRODUCT IS NON-ABSORBED WITHIN A SOLID MATRIX.

#### 4. FIRST AID MEASURES

TAKE PROPER PRECAUTIONS TO ENSURE YOU OWN HEAL ATTEMPTING TO RESCUE A VICTIM AND PROVIDE FIRS

# INHALATION:

#### ELECTROLYTE:

REMOVE TO FRESH AIR IMMEDIATELY. IF BREATHING

## LEAD COMPOUNDS:

REMOVE FROM EXPOSURE, GARGLE, WASH NOSE AND LI

#### SKIN CONTACT:

### ELECTROLYTE:

FLUSH WITH LARGE AMOUNTS OF WATER FOR AT LEAST CONTAMINATED CLOTHING COMPLETELY, INCLUDING SE UNTIL CLEANED. IF ACID IS SPLASHED ON SHOES, F CONTAIN LEATHER.

## LEAD COMPOUNDS:

WASH IMMEDIATELY WITH SOAP AND WATER. LEAD COMABSORBED THROUGH THE SKIN.

EYE CONTACT:

ELECTROLYTE AND LEAD COMPOUNDS:

FLUSH IMMEDIATELY WITH LARGE AMOUNTS OF WATER CONSULT PHYSICIAN IMMEDIATELY.

INGESTION:

ELECTROLYTE:

GIVE LARGE QUANTITIES OF WATER; DO NOT INDUCE

LEAD COMPOUNDS: CONSULT PHYSICIAN IMMEDIATELY.

#### **5. FIREFIGHTING MEASURES**

FLASH POINT: NOT APPLICABLE

FLAMMABLE LIMITS:

LEL: 4.1% (HYDROGEN GAS IN AIR)

UEL: 74.2%

EXTINGUISHING MEDIA: CO2; FOAM; DRY CHEMICAL

# FIRE FIGHTING PROCEDURES:

USE POSITIVE PRESSURE, SELF-CONTAINED BREATHING SPLATTER DURING WATER APPLICATION AND WEAR ACT FACE AND EYE PROTECTION. IF BATTERIES ARE ON CONTAINED EQUIPMENT, BUT, NOTE THAT STRINGS OF MAY STILL POSE RISK OF ELECTRIC SHOCK EVEN WHE DOWN.

#### HAZARDOUS COMBUSTION PRODUCTS:

IN OPERATION, OR WHEN ON CHARGE, BATTERIES GEN HYDROGEN AND OXYGEN GASES (HYDROGEN IS HIGHLY COMBUSTION). THEY MUST ALWAYS BE ASSUMED TO CC IGNITED BY BURNING CIGARETTE, NAKED FLAME OR S EXPLOSION WITH DISPERSION OF CASING FRAGMENTS ELECTROLYTE. CAREFULLY FOLLOW MANUFACTURER'S I AND SERVICE. KEEP AWAY ALL SOURCES OF GAS IGNI METALLIC ARTICLES TO SIMULTANEOUSLY CONTACT TE

#### **6. ACCIDENTAL RELEASE MEASURES**

REMOVE COMBUSTIBLE MATERIALS AND ALL SOURCES C MATERIAL AND CONTAIN SPILL BY DIKING WITH SODA NEUTRALIZE SPILL WITH SODA ASH, ETC. MAKE CERI COLLECT RESIDUE AND PLACE IN A DRUM OR OTHER S LABEL SPECIFYING "CONTAINS HAZARDOUS WASTE" OF DISTRIBUTOR REGARDING PROPER LABELING PROCEDUF WASTE. IF BATTERY IS LEAKING, PLACE BATTERY IN WEAR ACID RESISTANT BOOTS, FACE SHIELD, CHEMIC RESISTANT GLOVES. DO NOT ALLOW DISCHARGE OF AC MANAGED IN ACCORDANCE WITH APPROVED LOCAL, STA CONSULT STATE ENVIRONMENTAL AGENCY AND/OR FEDE

#### 7. HANDLING AND STORAGE

#### HANDLING:

SINGLE BATTERIES POSE NO RISK OF ELECTRIC SHOC RISK OF ELECTRIC SHOCK FROM STRINGS OF CONNECT 12-VOLT UNITS. BATTERIES ARE NON-SPILLABLE - F CONTENTS ONLY DURING RECYCLING OR IF OUTER CAS

#### STORAGE:

STORE BATTERIES UNDER ROOF IN COOL, DRY, WELL-SEPARATED FROM INCOMPATIBLE MATERIALS AND FROM FLAMES, SPARKS, OR HEAT. KEEP AWAY FROM METALI THE TERMINALS ON A BATTERY AND CREATE A DANGER

### CHARGING:

THERE IS A POSSIBLE RISK OF ELECTRIC SHOCK FRC FROM STRINGS OF SERIES CONNECTED BATTERIES, WE SHUT-OFF POWER TO CHARGERS WHENEVER NOT IN USE ANY CIRCUIT CONNECTIONS. BATTERIES BEING CHARG FLAMMABLE HYDROGEN GAS. CHARGING SPACE SHOULD VENT CAPS IN POSITION. PROHIBIT SMOKING AND AV SPARKS NEARBY. WEAR FACE AND EYE PROTECTION WE CHARGED.

#### 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS (MG/M3):

INGREDIENT	US	US	US
	OSHA	ACGIH	NIOSH
INORGANIC FORMS OF:			
LEAD	0.05	0.05	0.05
LEAD DIOXIDE	0.05(B)	0.05(B)	0.05(E
ANTIMONY	0.5	0.5	0.5
ELECTROLYTE (SULFURIC	1	0.2	1
ACID/WATER			
110127 ************************************			

#### NOTES:

SOLUTION)

- (A) AS INHALABLE AEROSOL
- (B) AS INORGANIC LEAD
- (C) THORACIC FRACTION
- (D) BASED ON OELS OF AUSTRIA, BELGIUM, DENMARK NETHERLANDS, SWITZERLAND, & UK

# ENGINEERING CONTROLS (VENTILATION):

STORE AND HANDLE IN WELL-VENTILATED AREA. IF MUSED, COMPONENTS MUST BE ACID-RESISTANT. HANDLE MAKE CERTAIN VENT CAPS ARE ON SECURELY. IF BAT BODILY CONTACT WITH INTERNAL COMPONENTS. WEAR FACE PROTECTION, WHEN CHARGING OR HANDLING BAT MANUFACTURERS' RECOMMENDATIONS WHEN STACKING COMPONENTS. WEAR NEGATIVE TERMINALS OF THE BATTERIES. USE A BAT BATTERY OR PLACE HANDS AT OPPOSITE CORNERS TO THE VENTS. AVOID CONTACT WITH INTERNAL COMPONE

HYGIENE PRACTICES:

WASH HANDS THOROUGHLY BEFORE EATING, DRINKING BATTERIES.

RESPIRATORY PROTECTION (NIOSH/MSHA APPROVED): NONE REQUIRED UNDER NORMAL CONDITIONS. WHEN CC ACID MIST ARE KNOWN TO EXCEED PEL, USE NIOSH C PROTECTION.

SKIN PROTECTION:

NONE REQUIRED UNDER NORMAL CONDITIONS. IF BATT RUBBER OR PLASTIC ACID-RESISTANT GLOVES WITH E ACID-RESISTANT APRON, CLOTHING, AND BOOTS.

EYE PROTECTION:

NONE REQUIRED UNDER NORMAL CONDITIONS. IF BATT CHEMICAL GOGGLES OR FACE SHIELD.

OTHER PROTECTION:

IN AREAS WHERE WATER AND SULFURIC ACID SOLUTIC CONCENTRATIONS GREATER THAN 1%, EMERGENCY EYEW SHOULD BE PROVIDED, WITH UNLIMITED WATER SUPPL

### 9. PHYSICAL AND CHEMICAL PROPERTIES - ELECTROLYTE

BOILING POINT @ 760 MMHg: 219 TO 237 DEG. F

SPECIFIC GRAVITY @ 77 DEG. F (H2O=1): 1.1394 T

MELTING POINT: NOT APPLICABLE

VAPOR PRESSURE (MMHg): 13.5 TO 20.8

% SOLUBILITY IN WATER: 100

PH: GREATER THAN 1

EVAPORATION RATE (BUTYL ACETATE=1): LESS THAN

VAPOR DENSITY (AIR=1): GREATER THAN 1

VISCOSITY: NOT APPLICABLE

APPEARANCE AND ODOR THRESHOLD:

SULFURIC ACID:

A CLEAR LIQUID WITH A SHARP, PENETRATING, PUNG A BATTERY IS A MANUFACTURED ARTICLE; NO APPARE

% VOLATILES BY VOLUME @ 70 DEG. F: NOT APPLICA

OCTANOL WATER PARTITION COEFFICIENT (KOW): NOT

NOTE: THE PROPERTIES ABOVE REFLECT 20-40% SULF

#### 10. STABILITY & REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID:

PROLONGED OVERCHARGING AND OVERHEATING CURRENT OF IGNITION.

INCOMPATIBILITIES: (MATERIALS TO AVOID)

#### ELECTROLYTE:

CONTACT OF SULFURIC ACID WITH COMBUSTIBLES AND FIRE AND EXPLOSION. ALSO REACTS VIOLENTLY WITH MOST METALS, SULFUR TRIOXIDE GAS, STRONG OXIDI WITH METALS MAY PRODUCE TOXIC SULFUR DIOXIDE F FLAMMABLE HYDROGEN GAS. NO FURTHER CONCERN FOF

## LEAD COMPOUNDS:

AVOID CONTACT WITH STRONG ACIDS, BASES, HALIDE NITRATE, PERMANGANATE, PEROXIDES, NASCENT HYDF PHOSPHORUS, SULFUR AND REDUCING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS:

#### ELECTROLYTE:

SULFUR TRIOXIDE, CARBON MONOXIDE, SULFURIC ACI HYDROGEN SULFIDE, HYDROGEN.

LEAD COMPOUNDS:

TEMPERATURES ABOVE THE MELTING POINT ARE LIKEI FUME, VAPOR, OR DUST; CONTACT WITH STRONG ACIL NASCENT HYDROGEN MAY GENERATE HIGHLY TOXIC ARS

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

#### 11. TOXICOLOGICAL DATA

ROUTES OF ENTRY:

ELECTROLYTE:

HARMFUL BY ALL ROUTES OF ENTRY. UNDER NORMAL C ACID VAPORS AND MIST ARE NOT GENERATED. SULFUF BE GENERATED WHEN PRODUCT IS OVERHEATED, OXIDI OR DAMAGED.

LEAD COMPOUNDS:

UNDER NORMAL CONDITIONS OF USE, LEAD DUST, VAF GENERATED. HAZARDOUS EXPOSURE CAN OCCUR-ONLY WITHE MELTING POINT, OXIDIZED OR OTHERWISE PROCEDUST, VAPOR, OR FUME.

ACUTE TOXICITY:

INHALATION LD50:

ELECTROLYTE:

LC50 RAT: 375 MG/M3

LC50:

GUINEA PIG: 510 MG/M3

ELEMENTAL LEAD:

ACUTE TOXICITY POINT ESTIMATE: 4500 PPMV (BASE

ORAL LD50:

**ELECTROLYTE:** 

RAT: 2140 MG/KG

ELEMENTAL LEAD:

ACUTE TOXICITY ESTIMATE (ATE):

500 MG/KG BODY WEIGHT (BASED ON LEAD BULLION)

INHALATION:

ELECTROLYTE:

BREATHING OF SULFURIC ACID VAPORS OR MISTS MAY IRRITATION.

LEAD COMPOUNDS:

INHALATION OF LEAD DUST OR FUMES MAY CAUSE IRF TRACT AND LUNGS.

INGESTION:

ELECTROLYTE:

MAY CAUSE SEVERE IRRITATION OF MOUTH, THROAT,

LEAD COMPOUNDS:

ACUTE INGESTION MAY CAUSE ABDOMINAL PAIN, NAUS SEVERE CRAMPING. THIS MAY LEAD RAPIDLY TO SYST INGESTION SHOULD BE TREATED BY PHYSICIAN.

SKIN CONTACT:

ELECTROLYTE:

SEVERE IRRITATION, BURNS, AND ULCERATION. SULF ABSORBED THROUGH THE SKIN AND IS NOT A DERMAL

LEAD COMPOUNDS:

NOT READILY ABSORBED THROUGH THE SKIN AND ARE

EYE CONTACT:

ELECTROLYTE: SEVERE IRRITATION, BURNS, CORNEA LEAD COMPOUNDS: MAY CAUSE EYE IRRITATION.

SYNERGISTIC PRODUCTS:

ELECTROLYTE: NO KNOWN SYNERGISTIC PRODUCTS

LEAD COMPOUNDS:

SYNERGISTIC EFFECTS HAVE BEEN NOTED WITH HEAVY MERCURY), N-NITROSO-N-(HYDROXYETHYL)ETHYLAMINE ACETAMIDE, 2-(NITROSOETHYLAMINE)ETHANOL, AND E

ANTIMONY OXIDE: NO SYNERGISTIC EFFECTS FOUND

ADDITIONAL INFORMATION:

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXF OVEREXPOSURE TO SULFURIC ACID MIST MAY CAUSE I PULMONARY CONDITIONS. CONTACT OF ELECTTOLYTE ( SOLUTION) WITH SKIN MAY AGGRAVATE SKIN DISEASE DERMATITIS. CONTACT OF ELECTROLYTE (WATER AND EYES MAY DAMAGE CORNEA AND/OR CAUSE BLINDNESS. AGGRAVATE SOME FORMS OF KIDNEY, LIVER, AND NEU

ADDITIONAL HEALTH DATA:

ALL HEAVY METALS, INCLUDING THE HAZARDOUS INGF TAKEN INTO THE BODY PRIMARILY BY INHALATION AN PROBLEMS CAN BE AVOIDED BY ADEQUATE PRECAUTION RESPIRATORY PROTECTION COVERED IN SECTION 8.

FOLLOW GOOD PERSONAL HYGIENE TO AVOID INHALATI WASH HANDS, FACE, NECK AND ARMS THOROUGHLY BEF LEAVING THE WORK SITE. KEEP CONTAMINATED CLOTH AREAS, OR WEAR COVER CLOTHING WHEN IN SUCH ARE PRESENCE OF FOOD, TOBACCO AND COSMETICS TO NOW CLOTHES AND WORK EQUIPMENT USED IN CONTAMINATE DESIGNATED AREAS AND NEVER TAKEN HOME NOR LAUN NON-CONTAMINATED CLOTHING.

THIS PRODUCT IS INTENDED FOR INDUSTRIAL USE ON FROM CHILDREN AND THEIR ENVIRONMENT.

## 12. ECOLOGICAL INFORMATION

ENVIRONMENTAL FATE:

LEAD IS VERY PERSISTENT IN SOIL AND SEDIMENTS.
DEGRADATION. MOBILITY OF METALLIC LEAD BETWEEN
SLOW. BIOACCUMULATION OF LEAD OCCURS IN AQUATI
AND PLANTS BUT LITTLE BIO ACCUMULATION OCCURS
STUDIES INCLUDE LEAD COMPOUNDS AND NOT ELEMENT

ENVIRONMENTAL TOXICITY:

AQUATIC TOXICITY:

#### SULFURIC ACID:

24-HR LC50, FRESHWATER FISH (BRACHYDANIO RERIC 96 HR-LOEC, FRESHWATER FISH (CYPRLNUS CARPIO):

#### LEAD:

48 HR LC50 (MODELED FOR AQUATIC INVERTEBRATES) <1 MG/L, BASED ON LEAD BULLION

#### 13. DISPOSAL INFORMATION

US:

#### SULFURIC ACID:

NEUTRALIZE AS DESCRIBED ABOVE FOR A SPILL, COI CONTAINER LABELED AS CONTAINING HAZARDOUS WAST WASTE. IF UNCERTAIN ABOUT LABELING PROCEDURES, DISTRIBUTOR OR LISTED CONTACT. DO NOT FLUSH LE SEWER.

#### SPENT BATTERIES:

SEND TO SECONDARY LEAD SMELTER FOR RECYCLING F STATE, AND LOCAL REGULATIONS.

#### 14. TRANSPORT INFORMATION

PROPER SHIPPING NAME: BATTERIES, NON-SPILLABLE

U.S DOT (US DEPARTMENT OF TRANSPORTATION): UNREGULATED, MEETS THE REQUIREMENT OF 49 CFR  $^{1}$ 

IATA AND ICAO:

UNREGULATED:

MEETS THE REQUIREMENTS OF SPECIAL REVISION A67 MEET THE SPECIAL PROVISION 238, THEY ARE EXEMP PROVIDED THAT THE BATTERIES' TERMINALS ARE PRC CIRCUITS.

IMO: UNREGULATED.

GRAINGER GLOBAL SOURCING SEAL LEAD-ACID BATTEF "NON-SPILLABLE" FOR THE PURPOSE OF TRANSPORTAT RESULT OF PASSING THE VIBRATION AND PRESSURE IN DOT[49 CFR 173.159(D) AND IATA/ICAO [SPECIA

GRAINGER GLOBAL SOURCING SEAL LEAD-ACID BATTEF ON DECK, OR UNDER DECK STORED ON EITHER A PASS RESULT OF PASSING THE VIBRATION AND PRESSURE

DIFFERENTIAL TESTS AS DESCRIBED IN THE REGULAT TO TRANSPORT THESE BATTERIES AS "NON-SPILLABLE CONDITION THAT WOULD PROTECT THEM FROM SHORT-C PACKAGED SO AS TO WITHSTAND CONDITIONS NORMAL CONSUMER, IN OR OUT OF A DEVICE, THEY ARE UNRE ADDITIONAL SPECIAL HANDLING OR PACKAGING.

FOR ALL MODES OF TRANSPORTATION, EACH BATTERY NON-SPILLABLE PER 4 CFR 13.15(D). IF YOU REPAC BATTERIES OR AS A COMPONENT OF ANOTHER PRODUCT PACKAGE NON-SPILLABLE PER 4 CFR 13.15(D).

### 15. REGULATORY INFORMATION

UNITED STATES:

EPA SARA TITLE III:

SECTION 302 EPCRA EXTREMELY HAZARDOUS SUBSTANC SULFURIC ACID IS A LISTED "EXTREMELY HAZARDOUS WITH A THRESHOLD PLANNING QUANTITY (TPQ) OF 1,

EPCRA SECTION 302 NOTIFICATION IS REQUIRED IF ACID IS PRESENT AT ONE SITE (40 CFR 370.10).

AN AVERAGE AUTOMOTIVE/COMMERCIAL BATTERY CONTA SULFURIC ACID. CONTACT YOUR EXIDE REPRESENTATI INFORMATION.

SECTION 304 CERCLA HAZARDOUS SUBSTANCES:
REPORTABLE QUANTITY (RQ) FOR SPILLED 100% SULF
(SUPERFUND) AND EPCRA (EMERGENCY PLANNING AND
IS 1,000 LBS. STATE AND LOCAL REPORTABLE QUANT

ACID MAY VARY.

## SECTION 311/312 HAZARD CATEGORIZATION:

EPCRA SECTION 312 TIER TWO REPORTING IS REQUIF BATTERIES IF SULFURIC ACID IS PRESENT IN QUANTIAND/OR IF LEAD IS PRESENT IN QUANTITIES OF 10,

#### SECTION 313 EPCRA TOXIC SUBSTANCES:

## SUPPLIER NOTIFICATION:

THIS PRODUCT CONTAINS A TOXIC CHEMICAL OR CHEM REPORTING REQUIREMENTS OF SECTION 313 OF (TITI AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND

CHEMICAL	CAS
LEAD(Pb)	7439-9
ELECTROLYTE: SULFURIC ACID (H2SO4)	7664-9
ANTIMONY (Sb)	7440-3
LEAD DIOXIDE (PbO2)	1309-6

IF YOU DISTRIBUTE THIS PRODUCT TO OTHER MANUFA THROUGH 39, THIS INFORMATION MUST BE PROVIDED EACH CALENDAR YEAR.

#### NOTE:

THE SECTION 313 SUPPLIER NOTIFICATION REQUIREM BATTERIES THAT ARE "CONSUMER PRODUCTS".

# TSCA:

EACH INGREDIENT CHEMICAL LISTED IN SECTION III ON THE TSCA REGISTRY.

OSHA: CONSIDERED HAZARDOUS UNDER HAZARD COMMUN

#### RCRA:

SPENT LEAD-ACID BATTERIES ARE NOT REGULATED AS RECYCLED. SPILLED SULFURIC ACID IS A CHARACTEF HAZARDOUS WASTE NUMBER D002 (CORROSIVITY).

#### CAA:

GRAINGER GLOBAL SOURCING SUPPORTS PREVENTATIVE DEPLETION IN THE ATMOSPHERE DUE TO EMISSIONS C DEPLETING CHEMICALS (ODC'S), DEFINED BY THE US PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT A FINALIZED ON JANUARY 19, 1993, EXIDE ESTABLISH THE USE OF CLASS I ODC'S PRIOR TO THE MAY 15,

NFPA HAZARD RATING FOR SULFURIC ACID:

HEALTH (BLUE) 3
FLAMMABILITY (RED) 0
REACTIVITY (YELLOW) 2

US STATE IDENTIFICATION NOTIFICATIC

NOTIFICATIONS & WARNINGS

CALIFORNIA CALIFORNIA "WARNING:

PROPOSITION 65 THIS PRODUC

KNOWN TO TH

REPRODUCTIV

BATTERY POS
ACCESSORIES
COMPOUNDS,
OF CALIFORN
REPRODUCTIV
CONTAIN OTH
STATE OF CA
WASH HANDS

THE FOLLOWI EXIST IN TH DISTRIBUTED THE STATE C BIRTH DEFEC HARM:

1. STRONG I INCLUDING S CAS #: NA;
2. LEAD AND CAS #. 7439

	CONSUMER PRODUCT VOLATILE ORGANIC COMPOUND EMISSIONS		PF VC INT
COUNTRY/ ORGANIZATION	IDENTIFICATION	NO	TIF
CANADA	ALL CHEMICAL SUBSTANIN THIS PRODUCT ARE LISTED ON THE CEPA DSL/NDSL OR ARE EXENFROM LIST REQUIREMEN	IN CR MPT PR ITS. CO RE PR	AC ITE ODU
		RE	GUI QUI
	NPRI AND ONTARIO REGULATION 127/01	TH	LLC E F NAC
			EMI
			AD LFÜ
	TOXIC SUBSTANCES	LE	AD
EU	EUROPEAN INVENTORY C EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS):	FI IN IN	L I NIS TO CLU VEN EMI

DATE ISSUED: SEPTEMBER 11, 2013

OTHER INFORMATION:

DISTRIBUTION INTO QUEBEC TO FOLLOW CANADIAN CC (CPR) 24(1) AND 24(2).

DISTRIBUTION INTO THE EU TO FOLLOW APPLICABLE IMPORT/EXPORT OF THE PRODUCT AS-SOLD.

SOURCES OF INFORMATION:

INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (1 EVALUATION OF CARCINOGENIC RISKS TO HUMANS:

OVERALL EVALUATIONS OF CARCINOGENICITY: AN UPDATING OF IARC MONOGRAPHS VOLUMES 1-42, S ONTARIO MINISTRY OF LABOR REGULATION 654/86. F EXPOSURE TO CHEMICAL OR BIOLOGICAL AGENTS.

VENDEE AND THIRD PERSONS ASSUME THE RISK OF IN THE MATERIAL IF REASONABLE SAFETY PROCEDURES A FOR IN THE DATA SHEET, AND VENDOR SHALL NOT BE OR THIRD PERSONS PROXIMATELY CAUSED BY ABNORMA IF REASONABLE PROCEDURES ARE FOLLOWED.

ALL PERSONS USING THIS PRODUCT, ALL PERSONS WC PRODUCT IS USED, AND ALL PERSONS HANDLING THIS WITH THE CONTENTS OF THIS DATA SHEET. THIS INF EFFECTIVELY COMMUNICATED TO EMPLOYEES AND OTHE WITH THE PRODUCT.

WHILE THE INFORMATION ACCUMULATED AND SET FORT ACCURATE AS OF THE DATE HEREOF, GRAINGER GLOBA WITH RESPECT THERETO AND DISCLAIMS ALL LIABILI RECIPIENTS ARE ADVISED TO CONFIRM TN ADVANCE C IS CURRENT, APPLICABLE, AND SUITABLE FOR THEIF

ANY PHOTOCOPY MUST BE OF THIS ENTIRE DOCUMENT

MSDS NO.: JTAC2014111303

VER. NO.: 1

ISSUE DATE: NOVEMBER 13, 2014

MSDS

# SEALED MAINTENANCE-FREE LEAD ACID BATTERIES

# GRAINGER GLOBAL SOURCING

11/13/2014

# **GHS-US**

2UKG8, 2UKG9, 2UKH1, 2UKH2, 2UKH3, 2UKH4, 2UKH5, 2UKH6, 2UKH7, 2UKH8, 2UKJ1, 2UKJ2, 2UKJ3, 2UKJ4, 2UKJ5, 2UKJ6, 2UKJ7, 2UKJ8, 2UKJ9, 2UKK1, 2UKK2, 2UKK3, 2UKK4, 2UKK5, 2UKK6, 2UKK7, 2UKL8, 2UKL9, 2UKL1, 2UKL2, 2UKL3, 2UKL4, 2UKL5, 2UKL6, 2UKL7, 2UKL8, 48H470, 48H471, 5EEH1, 5EEH3, 5EFE7, 5EFE8, 5EFE9, 5EFF1, 5EFF2, 5EFF3, 5EFF4, 5EFF5, 5EFF6, 5EFF7, 5EFF8, 5EFF9, 5EFG0, 5EFG1, 5EFG2, 5EFG3, 5EFG4, 5EFG5, 5EFG6, 5EFG7, 5EFG8, 5EFG9, 5EFH0, 5EFH2, 5EFH4, 5EFH5, 5EFH6

٠.

# A top

# :D BATTERIES

16 2UKH7 2UKH8 2UKJ1 2UKJ2
 11 2UKK2 2UKK3 2UKK4 2UKK5
 14 2UKL5 2UKL6 2UKL7 2UKL8
 15 5EFF6 5EFF7 5EFF8 5EFF9
 17 5EFG8 5EFG9 5EFH0 5EFH1

# A top

IAL COMPONENTS WILL NOT ATION IS PROVIDED FOR JRE THAT MAY OCCUR DURING JDER EXTREME HEAT CONDITIONS

WALLOWED.

RE SKIN BURNS AND EYE DAMAGE.

NHALED.

'ERTILITY OR THE UNBORN CHILD.

MAGE TO ORGANS THROUGH REPEATED EXPOSURE.

LAMMABLE GAS (HYDROGEN)

O AQUATIC LIFE WITH LONG

'HE DUST/FUME/GAS/MIST/VAPORS/

):

DO NOT INDUCE VOMITING.

(OR HAIR):
OFF IMMEDIATELY ALL
CLOTHING. RINSE SKIN WITH

:M TO FRESH AIR AND KEEP AT SITION COMFORTABLE FOR

OUSLY WITH WATER FOR SEVERAL MOVE CONTACT LENSES, IF EASY TO DO.
ISING.

CALL A POISON CENTER OR :CIAN.

'HE

\S/MIST/VAPORS/SPRAY

GHLY AFTER HANDLING.

'IVE GLOVES/PROTECTIVE

: PROTECTION/FACE PROTECTION.

L-VENTILATED AREA

) UP.

JLAGE

E TO THE ENVIRONMENT

CONTENTS/CONTAINER IN

IITH LOCAL/REGIONAL/NATIONAL/

L REGULATION.

ESSIVELY HIGH CURRENTS FOR

I PLACE MAY CREATE A

; INORGANIC ACID MIST

IATES, WATER, POWDERED METALS.
HEAT. CORROSIVE TO METALS.

A top

% BY WT.

- 44-57
- 1.0
- 19-26
- 15-22
- 23-27

DESIGN. INORGANIC LEAD AND
ARE THE PRIMARY COMPONENTS
BAL SOURCING OR ITS
DEPENDENT UPON BATTERY TYPE.
DF AUTOMOTIVE AND COMMERCIAL
SPILL AND COMPLETELY



JTH AND SAFETY BEFORE ST AID.

IS DIFFICULT, GIVE OXYGEN.

:PS; CONSULT PHYSICIAN.

15 MINUTES; REMOVE
HOES, AND DO NOT WEAR AGAIN
REMOVE AND DISCARD IF THEY

1POUNDS ARE NOT READILY

FOR AT LEAST 15 MINUTES;

VOMITING; CONSULT PHYSICIAN.



IG APPARATUS. BEWARE OF ACID
D-RESISTANT CLOTHING, GLOVES,
THARGE, SHUT OFF POWER TO THE
SERIES CONNECTED BATTERIES
N CHARGING EQUIPMENT IS SHUT

IERATE AND RELEASE FLAMMABLE
FLAMMABLE AND OXYGEN SUPPORTS
NOTAIN THIS GAS WHICH, IF
PARK, MAY CAUSE BATTERY
AND CORROSIVE LIQUID
INSTRUCTIONS FOR INSTALLATION
TION AND DO NOT ALLOW
HE NEGATIVE AND POSITIVE

OF IGNITION. STOP FLOW OF ASH, ETC. CAREFULLY
CAIN MIXTURE IS NEUTRAL THEN
UITABLE CONTAINER WITH A
(IF UNCERTAIN CALL
RES). DISPOSE OF AS HAZARDOUS
I A HEAVY DUTY PLASTIC BAG.
CAL SPLASH GOGGLES AND ACID
CID TO SEWER. ACID MUST BE
ATE, AND FEDERAL REQUIREMENTS.
CRAL EPA.

# A top

CK BUT THERE MAY BE INCREASING PROBLEM PROBLEM

-VENTILATED AREAS THAT ARE 1 ACTIVITIES WHICH MAY CREATE IC OBJECTS THAT COULD BRIDGE ROUS SHORT-CIRCUIT.

M CHARGING EQUIPMENT AND
IETHER OR NOT BEING CHARGED.

AND BEFORE DETACHMENT OF
JED WILL GENERATE AND RELEASE
BE VENTILATED. KEEP BATTERY
OID CREATION OF FLAMES AND
IEN NEAR BATTERIES BEING

# A top

	QUEBEC PEV	ONTARIO OEL	EU OEL
	0.05	0.05	0.15(A)
3)	0.05(B)	0.05(B)	0.15(A)
	0.5	0.5	0.5(A,D)
	1	0.2	0.05(C)

# (, FRANCE, GERMANY,

MECHANICAL VENTILATION IS

LE BATTERIES CAUTIOUSLY.

TERY CASE IS DAMAGED, AVOID
PROTECTIVE CLOTHING, EYE AND
TERIES. FOLLOW ALL

PALLETIZING. DO NOT ALLOW
OTH THE POSITIVE AND
TERY CARRIER TO LIFT A
AVOID SPILLING ACID THROUGH
ENTS OF THE BATTERIES.

OR SMOKING AFTER HANDLING

)NCENTRATIONS OF SULFURIC
)R MSHA-APPROVED RESPIRATORY

PERY CASE IS DAMAGED, USE LBOW-LENGTH GAUNTLET,

'EIY CASE IS DAMAGED,

NS ARE HANDLED IN
IASH STATIONS AND SHOWERS
.Y.

A top

0 1.3028

GENT ODOR.

BLE

! APPLICABLE

'URIC ACID



:; SPARKS AND OTHER SOURCES

ORGANIC MATERIALS MAY CAUSE STRONG REDUCING AGENTS,
ZERS, AND WATER. CONTACT
TUMES AND MAY RELEASE
MECHANICAL IMPACT

is, halogenates, potassium
cogen, carbides, sulfides

ID MIST, SULFUR DIOXIDE,

Y TO PRODUCE TOXIC METAL
) OR BASE OR PRESENCE OF
; INE GAS.

A top

CONDITIONS OF USE, SULFURIC RIC ACID VAPORS AND MIST MAY EXED, OR OTHERWISE PROCESSED

'ORS, AND FUMES ARE NOT
THEN PRODUCT IS HEATED ABOVE
L'SSED OR DAMAGED TO CREATE

:D ON LEAD BULLION)

# CAUSE SEVERE RESPIRATORY

ESOPHAGUS, AND STOMACH.

SEA, VOMITING, DIARRHEA, AND SEMIC TOXICITY. ACUTE

\*URIC ACID IS NOT READILY SENSITIZER.

NOT DERMAL SENSITIZERS.

DAMAGE, BLINDNESS.

! METALS (ARSENIC, CADMIUM,
!, N-(4-FLUORO-4-BIPHENYL)
BENZO[A]PYRENE.

## OSURE:

JUNG DAMAGE AND AGGRAVATE
[WATER AND SULFURIC ACID
IS SUCH AS ECZEMA AND CONTACT
SULFURIC ACID SOLUTION) WITH
LEAD AND ITS COMPOUNDS CAN
JROLOGIC DISEASES.

REDIENTS IN THIS PRODUCT, ARE ID INGESTION. MOST INHALATION IS SUCH AS VENTILATION AND

ON AND INGESTION:
ORE EATING, SMOKING OR
HING OUT OF NON-CONTAMINATED
AS. RESTRICT THE USE AND
I-CONTAMINATED AREAS. WORK
D AREAS MUST REMAIN IN
IDERED WITH PERSONAL

ILY AND SHOULD BE ISOLATED



NO DATA ON ENVIRONMENTAL I ECOLOGICAL COMPARTMENTS IS IC AND TERRESTRIAL ANIMALS THROUGH THE FOOD CHAIN. MOST AL LEAD.

)): 82 MG/L 22 MG/L

:

A top

LECT RESIDUE AND PLACE IN A
'E. DISPOSE OF AS A HAZARDOUS
CALL YOUR LOCAL BATTERY
'AD CONTAMINATED ACID TO

OLLOWING APPLICABLE FEDERAL,

A top

:, ELECTRIC STORAGE

.73.159(D)

'IF NON-SPILLABLE BATTERIES
'T FROM ALL IMDG CODES
)TECTED AGAINST SHORT

RIES ARE CLASSIFIED AS FIND BY DOT, AND IATA/ICAO AS DIFFERENTIAL TEST DESCRIBED LA PROVISION A67].

RIES CAN BE SAFELY TRANSPORTED SENGER OR CARGO VESSEL AS

#### 'IONS.:

I' THEY MUST BE SHIPPED IN A IRCUITS AND BE SECURELY
TO TRANSPORTATION BY A GULATED THUS REQUIRING NO

OUTER PACKAGE IS LABELED KAGE OUR BATTERIES EITHER AS YOU MUST LABEL THE OUTER



SES (EHS):
SUBSTANCE" UNDER EPCRA,
000 LBS.

500 LBS OR MORE OF SULFURIC

INS APPROXIMATELY 5 LBS OF VE FOR ADDITIONAL

\*URIC ACID UNDER CERCLA

COMMUNITY RIGHT TO KNOW ACT)

LITIES FOR SPILLED SULFURIC

RED FOR NON-AUTOMOTIVE SITIES OF 500 LBS OR MORE 000 LBS OR MORE.

1ICALS SUBJECT TO THE
LE) III OF THE SUPERFUND
) 40 CFR PART 372.

PERCENT BY WEIGHT

32-1 44-57

13-9 23-27

36-0 1.0

50-0 19-26

ACTURERS IN SIC CODES 20 WITH THE FIRST SHIPMENT OF

MENT DOES NOT APPLY TO

OF THIS SDS IS ALSO LISTED

IICATION ACT (29CFR1910.1200)

; HAZARDOUS WASTE WHEN RISTIC HAZARDOUS WASTE; EPA

: ACTIONS CONCERNING OZONE
)F CFCS AND OTHER OZONE
3EPA AS CLASS I SUBSTANCES.
MENDMENTS (CAAA) OF 1990,
IED A POLICY TO ELIMINATE
1993 DEADLINE.

#### )NS/WARNING

TO CONTAINS LEAD, A CHEMICAL IE STATE OF CALIFORNIA TO CR, OR BIRTH DEFECTS OR OTHER FE HARM."

STS, TERMINALS, AND RELATED
CONTAIN LEAD AND LEAD
CHEMICALS KNOWN TO THE STATE
HATO CAUSE CANCER AND
HER CHEMICALS KNOWN TO THE
LIFORNIA TO CAUSE CANCER.
AFTER HANDLING.

:NG CHEMICALS IDENTIFIED TO

HE FINISHED PRODUCT AS

INTO COMMERCE ARE KNOWN TO

OF CALIFORNIA TO CAUSE CANCER,

TTS OR TO CAUSE REPRODUCTIVE

:NORGANIC ACID MISTS

\*\*SULFURIC ACID:

23-27% WT

\*\*DEAD COMPOUNDS:

\*\*3-92-1; 63-83% WT.

T IS NOT REGULATED AS A CODUCT FOR PURPOSES OF C REGULATIONS, AS SOLD ENDED PURPOSE AND INTO THE COMMERCIAL SUPPLY CHAIN.

## 'ICATIONS/WARNING

PRODUCT HAS BEEN CLASSIFIED CORDANCE WITH THE HAZARD RIA OF THE CONTROLLED JCTS REGULATIONS AND THE SDS AND ALL THE INFORMATION RED BY THE CONTROLLED JCTS REGULATIONS.

TO THE CONTROLLED PRODUCTS

ATIONS FOR PRODUCT LABELING

REMENTS.

PRODUCT CONTAINS THE
)WING CHEMICALS SUBJECT TO
REPORTING REQUIREMENTS OF
)A NPRI AND/OR ONT.
127/01:

CAL CAS # %WT

7439-92-1 63-83

JRIC ACID 7664-93-9 23-27

:NGREDIENTS REMAINING IN THE SHED PRODUCT AS DISTRIBUTED COMMERCE ARE EXEMPT FROM, OR JDED ON, THE EUROPEAN ITORY OF EXISTING COMMERCIAL :CAL SUBSTANCES.



)NTROLLED PRODUCT REGULATIONS

DIRECTIVES TO THE USE,

.987), IARC MONOGRAPHS ON THE

SUPPLEMENT 7, LYON, FRANCE. REGULATIONS RESPECTING

IJURY PROXIMATELY CAUSED BY ARE NOT FOLLOWED AS PROVIDED LIABLE FOR INJURY TO VENDEE LUSE OF THE MATERIAL EVEN

ORKING IN AN AREA WHERE THIS
PRODUCT SHOULD BE FAMILIAR
ORMATION SHOULD BE
CRS WHO MIGHT COME TO CONTACT

TH HEREIN IS BELIEVED TO BE LEVEL SOURCING MAKES NO WARRANTY TY FROM RELIANCE THEREON.

F NEED THAT THE INFORMATION PARTICULAR CIRCUMSTANCES.