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Material Safety Data Sheet

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:	Valve Regulated Sealed Lead Crystal Battery
OTHER PRODUCT NAMES:	Lead Crystal Battery
CLASSIFICATION:	Substance classification: UN2800
MANUFACTURER :	Enix Energies
ADDRESS :	27 Rue des Glairaux 38120 Saint Egrève France
PRODUCT USE:	UPS,communication,Electric vehicle and Solar Energy Storage

SECTION 2 HAZARDS IDENTIFICATION

HAZARD IDENTIFICATION:

The battery has passed the vibration test, pressure differential test and leakage test at 55˚C according to Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations SPECIAL PROVISION 238.

It is not restricted to IATA DGR according to Special provision A67.

It is not restricted to IMDG CODE according to Special provision 238.

EMERGENCY OVERVIEW:

The internal battery materials may cause severe irritation to eyes and skin. Causes burns.

SECTION 3 INFORMATION ON INGREDIENTS

INGREDIENTS	WEIGHT PERCENT	CAS No.	EC No.
Lead	40-50%	7439-92-1	231-100-4
Lead dioxide	20-30%	1309-60-0	215-174-5
ABS Shell	6-25%	9003-56-9	/
Sulfuric Acid	1.75-3%	7664-93-9	231-639-5
Water	2.8-4.5%	7732-18-5	231-791-2
Silicone dioxide	1.4-3%	7631-86-9	231-545-4

ADDITIONAL INFORMATION:

The effective components are reflected as a percent-age (by Wt) of the finished product.

These percentages vary between specific models, therefore a min and max % is given.

SECTION 4 FIRST-AID MEASURES

SKIN CONTACT:

If the internal battery materials of an opened battery cell come into contact with he skin,immediately flush with plenty of water for at least 15 minutes.Seek immediate medical attention.

EYE CONTACT:

Flush eyes with large amounts of water for at least 10-15 minutes. Seek immediate medical attention if eyes have been exposed directly to acidic electrolyte.

INHALATION:

If breathing difficulties develop, remove person to fresh air. If symptoms persist, seek medical attention.

INGESTION:

If swallowed the internal materials, give large amounts of water. Do not induce vomiting.Seek immediate medical attention.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:

Dry chemical, Sandy soil, Carbon dioxide or appropriate foam.

FIREFIGHTING:

Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

Specific hazards: Emit toxic fumes under fire conditions.

SECTION 6 ACCIDENTAL RELEASE MEASURES

If batteries show signs of leaking,avoid skin or eyes contact with the material leaking from the battery.Use chemical resistant rubber gloves and non-flammable absorbent materials for clean up.Mix with inert material (e.g.dry sand, vermiculite) and transfer to sealed container for disposal.

SECTION 7 HANDLING AND STORAGE

HANDLING:

Keep away from ignition sources,heat and flame,Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits.Aviod mechanical or electrical abuse and overcharge.More than a momentary short circuit will generally reduce the battery service life. Avoid reversing battery polarity within the battery assembly. In case of a battery unintentionally be crushed, acid resistant gloves must be used to handle all battery components,Aviod contact with eyes, skin. Aviod inhalation. No smoking at working site.Materials to aviod: Strong oxidant,Combustible materials and corrosives.

STORAGE:

Storage in cool,well-ventilated area. Keep away from ignition sources,heat and flame,Such batteries must be packed in inner packages in such a manner as to effectively prevent short circuits and to prevent movement which could lead to short circuits.Materials to aviod: Strong oxidant,Combustible materials and corrosives.

SECTION 8 EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING CONTROLS:

Use ventilation equipment if available. Safety shower and eye bath.

PERSONAL PROTECTION EQUIPMENT:

Respiratory: Wear government approved air-purifying respirator if needed.
Eye:Chemical safety glasses.
Clothing:Wear appropriate protective clothing.
Hand: Wear acids resistant gloves.

OTHER PROTECT:

No smoking,drinking and eating at working site. Wear thoroughly after handling.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Rectangle Solid,Black/Blue/Hoar/Green ABS plastic shell
ODOR:	Odorless
pH:	5-6
MELTING POINT:	＞300℃
BOILING POINT:	Not available
FLASH POINT:	Not available
SELF-IGNITING:	Not available
DANGER OF EXPLOSION:	Not available
DENSITY:	1.250-1.330(Electrolyte)
RELATIVE DENSITY:	Not available

SECTION 10 STABILITY AND REACTIVITY

STABILITY: .
Stable under normal temperatures and pressures.
CONDITIONS TO AVOID:

Avoid exposure to heat and open flame.Aviod mechanical abuse and overcharge.Prevent short circuits.Prevent movement which could lead to short circuits.

MATERIAL TO AVOID:
Strong oxidant,Corrosives.
HAZARDOUS POLYMERIZATION:
Will not occur.
HAZARDOUS DECOMPOSITION PRODUCTS:
Sulfur oxides, Sulfuric acid mist, Metal oxides.

SECTION 11 TOXICOLOGICAL INFORMATION

TOXICITY DATA:
Not available

IRRITATION DATA:

The internal battery materials may cause severe irritation to eyes and skin. Causes burns.

CARCINOGENICITY:

The international agency on cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid" as a category 1 carcinogen (inhalation), a substance that is carcinogenic to humans. This classification does not apply to the diluted sulfuric acid contained within the lead crystal batteries. Misuse of the product such as constant overcharging may result in the generation of sulfuric acid mist .

SECTION 12 ECOLOGICAL INFORMATION

Lead and its compounds can result in a threat if released into the environment.
In most surface water and groundwater,lead forms compounds with anions such as hydroxides,carbonates,sulfates,and phosphates,and precipitates out of the water column.Lead may occur as sorbed ions or surface coatings on sediment mineral particles or may be carried in colloidal particles in surface water.Most lead is strongly retained in soil,resulting in little mobility. Lead may be immobilized by ion exchang with hydrous oxides or clays or by chelation with humic or fulvic acids in the soil.
Leak(dissolved phase) is bioaccumulated by plants and animals,both aquatic and terrestrial.

SECTION 13 DISPOSAL CONSIDERATIONS

Lead crystal batteries are recyclable when sent to a secondary lead smelter. Following local, State/Provincial, and Federal/National regulations applicable to end-of-life characteristics will be the responsibility of the end-user.

SECTION 14 TRANSPORT INFORMATION

The battery has passed the vibration test, pressure differential test and leakage test at 55˚C according to Recommendations on the TRANSPORT OF DANGEROUS GOODS Model Regulations SPECIAL PROVISION 238.

Land transportation

UN Code :	UN2800
ADR / RID Classification:	Class 8
Official transportation name :	FLUID WATERTIGHT ELECTROLYTE BATTERIES
Tunnel Code:	E

Maritime transportation

UN Code :	UN2800
IMDG Classification:	Class 8
Official transportation name :	FLUID WATERTIGHT ELECTROLYTE BATTERIES
EmS :	F-A, S-B

Air transportation

UN Code:	UN2800
IATA Classification:	Class 8
Official transportation name :	FLUID WATERTIGHT ELECTROLYTE BATTERIES
A48 Special provision :	Packaging tests are not considered to be necessary
A67 Special provision:	NX Lead crystal batteries fulfill the requirements of the 872-packaging directive.

SECTION 15 REGULATORY INFORMATION

EU ADDITIONAL CLASSIFICATION:

S 36/37

Safety Statements: Wear suitable protective clothing and gloves.

SECTION 16 OTHER INFORMATION

DATE OF ISSUE:

1.1st of January 2024

DEPARTMENT ISSUING MSDS:

Enix Energies

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