



Hemnall Street, Epping, Essex CM16 4LG
Telephone: 0208 988 7400 E-mail: service@clarkeinternational.com

Product: IG4000
Part Number: 8877130



Report No.: TDT240125042EN

Date: Jan. 27, 2024

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Material Safety Data Sheet (MSDS)

Samples Name: Lead-acid battery

Model No.: 6-FM-4,6-FM-5,6-FM-5L,6-FM-6.5,6-FM-7,6-FM-7A,6-FM-7B,6-FM-7D,6-FM-7L,6-FM-7L(II),6-FM-9,6-FM-10,6-FM-12,6-FM-14,6-FM17,6-FM-18,6-FM-28,6-FM-36,6-FM-45,YB18,YB28,YB32.

Client Name: Chongqing Chuangxiang Power Source Co., Ltd.

Client Address: 8# Jinshan Road, Dongcheng Street Office, Tongliang District,Chongqing,China.

Signed for and on Behalf of TDT

Li.zhang / Technical Manager
Shenzhen TDT Technology Co., Ltd.

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Shenzhen TDT Technology Co., Ltd.

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Material Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product Name: Lead-acid battery

Nominal Voltage: 12V

Manufacturer: Clarke International

Address: Hemnall Street, Epping, Essex, CM16 4LG

Contact person: \

Tel: 0208 988 7400

Email: service@clarkeinternational.com

Uses: \

Section 2 - Hazards Identification

Hazard Description: The product is a battery. Not dangerous with normal use. Do not dismantle, open or shred the battery ingredients contained within or their ingredients products could be harmful.

Primary Route(S) of Exposure: Eye, Skin contact, Inhalation, Ingestion.

Health hazards: Skin contact: May cause skin irritation.

Eye contact: May cause eye irritation.

Inhalation: Vapors or mists from a ruptured battery may cause respiratory irritation.

Ingestion: May cause body discomfort.

Section 3 - Composition/Information on Ingredient

Pure ☐

Admixture ☐

Composition:

Chemical Name	Weight (%)	CAS No.
Lead	33	7439-92-1
ABS	8	9003-56-9
Sulfuric acid	20	7664-93-9
Lead peroxide	30	1309-60-0
Copper	1	7440-50-8
Glass fiber	4	\
Bicyclo[2.2.1]hept-2-ene, 5-ethylidene-, polymer with ethene and 1-propene	1	32069-93-5

Note: CAS No.: Chemical Abstract Service Registry Number.

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Section 4 - First Aid Measures

Skin contact: Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.

Eyes contact: Immediately flush with plenty of water for at least 15 minutes and seek medical attention.

Inhalation: Remove from exposure and move to fresh air immediately. Use oxygen if available.

Ingestion: Ingesting damaged batteries, do not induce vomiting or give food or drink. Seek medical attention immediately.

Section 5 - Fire Fighting Measures

Characteristic of Hazard: Toxic fumes, gases or vapors may evolve on burning.

Hazardous combustion products: Carbon monoxide, carbon dioxide, lithium oxide fumes.

Fire-Fighting method: Extinguish the fire with water, dry powder or carbon dioxide. The firemen should put on antigas masks and full fire-fighting suits.

Section 6 –Accidental Release Measures

Personnel protection measures, protective equipment and emergency disposal procedures: Restrict access to area until completion of clean-up. Do not touch the spilled material. Wear adequate personal protective equipment as indicated in Section 8.

Environmental precautions: Prevent product from contaminating soil and from entering sewers or waterways.

Methods and materials for Containment: Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately.

Methods and materials for cleaning up: Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water collect all contaminated wash water for proper disposal.

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Section 7 - Handling and Storage

Handling: The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

Storage: If the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically.

Long period storage: $-10^{\circ}\text{C} \sim 35^{\circ}\text{C}$, $60 \pm 25\% \text{R.H.}$

Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. Keep out of reach of children. Do not expose the battery to heat or fire. Avoid storage in direct sunlight. Do not store together with oxidizing and acidic materials.

Section 8 - Exposure Controls and Personal Protection

Engineering Controls: No engineering controls are required for handling batteries that have not been damaged. Personal protective equipments for damaged batteries should include chemical resistant gloves and safety glasses. Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment: Eye and Face Protection: Not necessary under conditions of normal use. If there is a Hazard of contact, tight sealing safety goggles. Face protection shield.

Skin and Body Protection: Not necessary under conditions of normal use. If there is a Hazard of contact, wear protective gloves and protective clothing.

Respiratory Protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

Section 9 - Physical and Chemical Properties

Physical State: Solid.

Color: No data.

Odour: Under normal circumstances is odorless; if leaking, smells of medical ether.

Solubility: Insoluble in water.

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Section 10 - Stability and Reactivity

Stability: Stable under normal temperature and pressure.

Incompatible materials: Oxidising agents, alkalis, water.

Conditions to Avoid: Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.

Hazardous polymerization: Will not occur.

Hazardous Decomposition Products: Toxic Fumes, and may form peroxides.

Section 11 - Toxicological Information

Irritation: In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

Acute Toxicity: No known significant effects or critical hazards.

Sub-acute and Chronic Toxicity: No known significant effects or critical hazards.

Sensitization: No known significant effects or critical hazards.

Mutagenicity: No known significant effects or critical hazards.

Carcinogenicity: No known significant effects or critical hazards.

Section 12 - Ecological Information

General note: Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Anticipated behavior of a chemical product in environment/possible environmental impact/ecotoxicity: No date is available.

Section 13 - Disposal Considerations

Waste Treatment: Dispose in accordance with national and local regulations.

Attention for Waste Treatment: Deserted batteries shouldn't be treated as ordinary trash. Shouldn't be thrown into fire or placed in high temperature. Shouldn't be dissected, pierced, crushed or treated similarly. Best disposal method is recycling.

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Section 14 - Transport Information

UN Classification: Class 8.

UN Number: UN2800.

UN Proper shipping name/Description(technical name): BATTERIES,WET,NONSPILLABLE,electric storage.

Packaging Mark: No data.

Packaging Method: No data.

Type of Transportation:No data.

Transport Attentions: Please select appropriate transportation mode and corresponding transportation and storage conditions according to the nature of the chemicals, and keep away from fire and heat sources. The means of transport shall be equipped with fire-proof materials and fire-extinguishing equipment of corresponding types and quantities.

Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises.

IATA: Packaging need to be complied with the requirements of Packing Instruction 872 of special provision A67 of IATA DGR 65th (2024 Edition) Manual.

IMDG CODE: The batteries are not restricted to IMDG Code 2022 Edition(Amdt41-22) according to special provision 238.

ADR : Autorisation Dangerous Road(ADR 2019 Volume I).

Section 15 - Regulatory Information

Contents and project sequence of ISO 11014-2009 chemical safety data sheet.

Regulation (EC) no 1272/2008 on the classification, labelling and packaging of substances and mixtures.

Dangerous Goods Regulations

Recommendations on the Transport of Dangerous Goods-Model Regulations

Recommendations on the Transport of Dangerous Goods-Manual of Tests and Criteria

International Air Transport Association(IATA) DGR, 65th(2024 Edition)

International Maritime Dangerous Goods(IMDG)

Technical Instructions for the Safe Transport of Dangerous Goods

Toxic Substance Control Act(TSCA)

Code of Federal Regulations

In accordance with all FederalState and local laws

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Section 16 - Other Information

The above information is based on the data we understand, Since this information may be applied under conditions beyond our control and with which may be unfamiliar and since data made available subsequent to the data hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. The person receiving it shall make his own determination of the suitability of the material for his particular purpose. The risk of using relevant materials shall be borne by the purchaser or user.

End of Report

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