Material Safety Data Sheet

For

DC Power Group

1258 Boundary Rd Burnaby, BC V5K 4T6

and for their product

Valve Regulated Lead Acid Batteries

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Model/type reference	. VTA12-100	
Serials Models	VTA12-1.3 F1,VTA12-3.3 F1,VTA6-5,VTA6-7,VTA6-12 F1, VTA12-5 F1,VTA12-5 F2,VTA12-7 F1,VTA12-7 F2,VTA12-9 F2, VTA12-12,VTA12-15,VTA12-18,VTA12-20,VTA12-26,VTA12-35, VTA12-50,VTA12-55,VTA12-65,VTA12-75L,VTA12-100,VTD12-40, VTD12-75,VTD12-85,VTD12-100,VTD12-110,VTD12-135,VTD6-210, VTD6-220 FR,VTD6-225,VTD6-330,VTD6-420,VTD8-170, VTD12-230,VTD2-1300,VTD12-300,VTG12-14 F2,VTG12-20, VTG12-35,VTG12-40,VTG12-55,VTG12-85,VTG12-100,VTG12-110, VTG6-250,VTG6-420,VTG12-300,VTG2-400,VTC6-220,VTC6-240, VTC12-100,VTC12-135,VTC8-170,VTC6-400,VFT12-55,VFT12-100, VFT12-110,VFT12-150,VFT12-200,VHD12-35W,VHD12-115W, VHD12-300W, VHD12-370W,VHD12-170W,VHD6-720W	
Nominal Voltage	. 12V	
Typical Capacity	. 100Ah	
Weight	. 26.5kg	
Shape and Physical Dimension (mm)	.307(L)*169(W)*211(H)*215(TH) mm	
Version number		
Revision date	. N/A	
Issue Day	. Oct. 29, 2025	
Laboratory	: Shenzhen BTL Testing Technology Co., Ltd.	
Address	Room 201, Building 1, Anxu Business Park, No. 35-1, Xiangyin Road, Nanlian Community, Longgang Street, Longgang District, Shenzhen	
Web	: Http://www.beidelab.com	
Mail	beide@beidelab.com	
Compiled by (name+ signature)	: Sean Huang	
Approved by (+ signature)	: July Yan	

Shenzhen BTL Testing Technology Co., Ltd.

Address: Room 201, Building 1, Anxu Business Park, No. 35-1, Xiangyin Road, Nanlian Community, Longgang Street, Longgang District, Shenzhen Web: Http://www.beidelab.com Mail: beide@beidelab.com



IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Identifier

Product name: Valve Regulated Lead Acid Batteries

Model: VTA12-100

Details of the supplier of the safety data sheet:

Supplier Name: DC Power Group

Address: 1258 Boundary Rd Burnaby, BC V5K 4T6 Telephone number of the supplier: 1-888-226-8832 Emergency Telephone No.(24h): 1-888-226-8832

Fax: N/A

Postcode: V5K 4T6

E-mail address: info@dcpg.ca

2. HAZARDS IDENTIFICATION

Emergency Overview: May explode in a fire, which could release irritant gas.

Primary routes of entry:

Eye: No known significant effects or critical hazards under normal use. Contact with damaged batteries may cause severe irritation, burns, cornea damage, and blindness, Lead components may cause eye irritation.

Skin: No known significant effects or critical hazards under normal use. Contact with damaged batteries may cause burns and ulceration, Lead compounds may not absorbed through the skin.

Inhalation: No known significant effects or critical hazards under normal use. Inhalation of vapors or fumes released due to heat or a large number of leaking batteries maycause respiratory and eye irritation.

Ingestion: If swallowed by mistake, Sulfuric acid may cause severe irritation of mouth, throat, esophagus and stomach, Acute ingestion may cause abdominal pain, nausea, vomiting, diarrhea and severe cramping. This may lead rapidly to systemic toxicity and must be treated by a physician.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization: Mixtures

Description:

Product: Consisting of the following components.

Common Chemical Name	CAS Number	Concentration (%)	
Positive plate: Lead dioxide	1309-60-0	36%	
Negative plate: Lead	7439-92-1	30.2%	
Electrolyte: Dilute sulfuric acid	7664-93-9	24.5%	



Battery case: ABS	9003-56-6	6.6%
Partition Fiberglass	65997-17-3	2.7%
Positive plate: Lead dioxide	1309-60-0	36%

CAS: Chemical Abstract Service

N/A: Not Applicable

Skin Corr. 1A (H314): Causes severe skin burns and eye damage.

4. FIRST-AID MEASURES

Skin contact

If the battery is leaking and the contained material contacts the skin, remove contaminated clothes quickly and rinse the skin with plenty of water at least 15 minutes. If irritation or pain persists, get medical aid at once.

Eye contact

If the battery is leaking and the contained material contacts the eyes, flush the eyes with plenty of water or saline water at least 15 minutes. Get medical aid at once.

Inhalation

If the battery is leaking, remove to fresh air immediately. Keep the respiratory tract smooth. Use oxygen if available. Get medical aid.

Ingestion

If the battery is leaking and the contained material is ingested, rinse mouth and surrounding area with clear water at once. Get medical aid at once.

5. FIRE-FIGHTING MEASURES

<u>Combustion hazard:</u> Products may burst and release hazardous decomposition products when exposed to a fire situation.

<u>Fire-Fighting method & media:</u> The staff must equipped with filtermask (full mask) or isolated breathing apparatus. The staff must wear the clothes which can defense the fire and the toxic gas. Put out the fire in the upwind direction. Remove the container to the open space as soon as possible. Sparying water on the containers in the fireplace to keep them cool until finish extinguishment. Media: hazy water, foam, powder, CO2, sandy clay.

Combustion products: Carbon monoxide, carbon dioxide, metal oxide, irritate fume, etc.

6. ACCIDENTAL RELEASE MEASURES

Disposal methods:

- 1. Rapid evacuation leakage pollution area personnel to safe areas, and isolation, strictly limited access;
- 2. Provide adequate protection and ventilation equipment;
- 3. Cleaning the spillage with the method does not produce dust, collect the leakage in a suitable labeled containers much as possible;



- 4. In a safe condition, choose appropriate ways to prevent or reduce leakage, for example use sand or clay ring-fence leakage, possible cut off leakage source, avoid into sewer or other enclosed spaces:
- 5. Cut off the source of leakage as much as possible, avoid entering sewers or other confined space;
- 6. If a large number of leakage, collect and recycle leakage to suitable and indicative covered container, and shipped to a special waste disposal site disposal.

Waste treatment methods:

All waste must be referring to the United Nations, national and local regulations for disposal.

7. HANDLING AND STORAGE

<u>Handling:</u> Job site should keep ventilation. Keep away from heat. Reduce dust accumulation and generation. Avoid eye contact. Avoid breathing dust. Wash with soap and water after contact. Empty containers will contain this chemical residue. Don't damage the empty container.

Storage: Stored in a low temperature, dry, well ventilated environment. Avoid direct sunlight. Store away from food and water, wash your hands thoroughly before eat bread or drink water. Far from taboo object, such as strong oxidizer, strong acid. Keep away from fire and heating sources. Equipped with corresponding varieties and number of fire equipment. Storage areas should be equipped with leakage emergency treatment equipment and suitable for accept materials.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Monitoring method: No data available.

Engineering controls: Ensure vapor concentration in the workshop under the requirements of existing OSHA.

<u>Respiratory system safeguard:</u> If burn under the fire, exceed the standard concentration in air, must wear self-priming filter type gas mask (half mask), emergency rescue or evacuation, should wear air respirator.

Eye safeguard: No data available

Body safeguard: Wear working clothes.

Hand safeguard: Wear glove.

Else safeguard: No smoking, dining and drinking water in the workplace. Keep good habit of hygiene. Avoid prolonged and repeated contact. After work, shower and change clothes.

Exposure Guidelines

Ingredients	The 8-Hour Exposure Limit (TLV-TWA)	
	OSHA	ACGIH TLV
Lead	50ppm	150ppm

9. PHYSICAL AND CHEMICAL PROPERTIES

General Information

a) Appearance: The sample is solid, with black plastic shell.

b) Odor: Not applicable.



c) Melting point/freezing point: Not applicable.

d) Initial boiling point: Not applicable.

e) Flashpoint: Not applicable.

f) Evaporation rate: Not applicable.

g) Flammability (soil, gas): Not applicable.h) Lower flammability limit: Not applicable.i) Upper flammability limit: Not applicable.

j) Vapor pressure: Not applicable.k) Sublimation point: Not applicable.

I) N-octanol/water partition coefficient: Not applicable.

m) Auto-ignition temperature: Not applicable.n) Decomposition temperature: Not applicable.

10. STABILITY AND REACTIVITY

Stability

Stable under ordinary conditions of use and storage.

Avoid contact conditions

Prolonged overcharge, Open fire

Prohibited content

Sulfuric Acid: Contact with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, sulfur trioxide gas, strong oxidizers and water. Contact with metals may produce toxic sulfur dioxide fumes and may release flammable hydrogen gas.

Lead Compounds: Avoid contact with strong acids, bases, halides, halogenates, potassium nitrate, permanganate, peroxides, nascent hydrogen and reducing agents.

Aggregate harm:

No data available

Decomposition product

Sulfuric Acid: Sulfur trioxide, carbon monoxide, sulfuric acid mist, sulfur dioxide, and hydrogen. Lead Compounds: High temperatures likely to produce toxic metal fume, vapor, or dust; contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas.

11. TOXICOLOGICAL INFORMATION

Toxicology influencing information

Routes of Entry

Sulfuric Acid: Harmful by all routes of entry. Lead Compounds: Hazardous exposure can occur only when product is heated, oxidized or otherwise processed or damaged to create dust, vapor or fume.

Acute toxicity

Sulfuric Acid: Severe skin irritation, damage to cornea, upper respiratory irritation.

Lead Compounds: Symptoms of toxicity include headache, fatigue, abdominal pain, loss of appetite, muscular aches and weakness, sleep disturbances and irritability.



Chemical Name	CAS No.	EC No.	LD50
Elemental Lead	64-17-7439-92-15	231-100-4	Inhalation : Acute Toxicity Point Estimate = 4500 ppmV (based on lead bullion) Oral: Acute Toxicity Estimate (ATE) = 500 mg/kg body weight (based on lead bullion)

Chronic toxicity

Sulfuric Acid: Possible erosion of tooth enamel, inflammation of nose, throat and bronchial tubes. Lead Compounds: Anemia; neuropathy, particularly of the motor nerves, with wrist drop; kidney damage; reproductivechanges in males and females.

Carcinogenicity

Sulfuric Acid: The International Agency for Research on Cancer (IARC) has classified "strong inorganic acid mist containing sulfuric acid" as a Category I carcinogen, a substance that is carcinogenic to humans. This classification does not apply to liquid forms of sulfuric acid or sulfuric acid solutions contained within a battery

Lead Compounds: Lead is listed as a 2B carcinogen, likely in animals at extreme doses. Proof of carcinogenicity in humans is lacking at present.

Reproduction toxicity

No data available

If the cells are opened through misuse or damage, discard immediately. Internal components of cell are irritants and sensitizers.

12. Ecological Information

Ecotoxicity

Based largely or completely on information for similar material. Material is moderately toxic to aquatic organisms on an acute basis.

Biological degradability

No known significant effects or critical hazards.

Non-living things degradability

No known significant effects or critical hazards.

biology gathering and biology accumulate

Lead acid batteries are categorized as hazardous waste due to their corrosivity, reactivity, and toxicity. And to ensure that as many of these batteries as possible are recovered and recycled.

13. DISPOSAL CONSIDERATIONS

All waste must be referring to the United Nations, national and local regulations for disposal, the dumped or discarded material may be regard as a restrictive waste referring to local regulations. Cleaned containers containing this substance were also required treatment. Comply with waste law. Atmospheric Pollution Act and water pollution law for disposal.



14. TRANSPORT INFORMATION

Label for conveyance: Not applicable.

UN Number: Not applicable.

Marine pollutant: No.

The samples are properly so as to prevent short circuits in the package.

According to the relevant provision of UN "Recommendations on the TRANSPORT OF DANGEROUS GOODS"ST/SG/AC.10/1/Rev.23,IATADangerous Goods Regulations 66th Edition and IMDG Code (Amdt.42-24), the sample doesn't belong to Dangerous Goods.

15. REGULATORY INFORMATION

EPA SARA Title III:

Section 302 EPCRA Extremely Hazardous Substances (EHS):

Sulfuric acid is a listed "Extremely Hazardous Substance" under EPCRA, with a Threshold Planning Quantity (TPQ) of 1,000 lbs. EPCRA Section 302 notification is required if 500 lbs or more of sulfuric acid is present at one site (40 CFR 370.10). For more information consult 40 CFR Part 355.

Section 304 CERCLA Hazardous Substances:

Reportable Quantity (RQ) for spilled 100% sulfuric acid under CERCLA (Superfund) and EPCRA (Emergency Planning and Community Right to Know Act) is 1,000 lbs. State and local reportable quantities for spilled sulfuric acid may vary.

Section 311/312 Hazard Categorization:

EPCRA Section 312 Tier Two reporting is required for non-automotive batteries if sulfuric acid is present in quantities of 500 lbs or more and/or if lead is present in quantities of 10,000 lbs or more. For more information consult 40 CFR 370.10 and 40 CFR 370.40

Section 313 EPCRA Toxic Substances:

40 CFR section 372.38 (b) states: If a toxic chemical is present in an article at a covered facility, a person is not required to consider the quantity of the toxic chemical present in such article when determining whether an applicable threshold has been met under § 372.25, § 372.27, or § 372.28 or determining the amount of release to be reported under § 372.30. This exemption applies whether the person received the article from another person or the person produced the article. However, this exemption applies only to the quantity of the toxic chemical present in the article.

Supplier Notification: This product contains toxic chemicals that may be reportable under EPCRA Section

313 Toxic Chemical Release Inventory (Form R) requirements. For a manufacturing facility under SIC codes 20 through 39, the following information is provided to enable you to complete the required reports:

Toxic Chemical	CAS Number	Approximate % by Weight
Lead	7439-92-1 50	50
Sulfuric Acid/Water Solution	7664-93-9 17	17
Lead Oxide	1360-60-0 20	20



Please note that waste disposal should meet local regulatory requirements.

16. OTHER INFORMATION

The above information are correct, but does not contain all of the information and only used as a guide. The information in this document is based on our current knowledge, it apply to this product as for the correct safety tips. The information does not guarantee the properties of this product. Our company is not responsible for any damages caused by the products.