Product Information

Type series **trak.bloc, solar.bloc**

Valve regulated lead acid battery

1. GENERAL INFORMATION

Manufacturer's Name: HOPPECKE Batterien GmbH & Co. KG Bontkirchener Str. 1 59929 Brilon **Telephone number for information: 02963 61 464** **Emergency telephone number:** **For transports only** **National/International: +46 (0) 178 433 74 34** **USA: 01149 178 433 74 34**	**Date: 29.06.2011** **Trade Name:** trak bloc solar bloc Sealed Valve Regulated Non Spillable Lead Acid Battery

2. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Hazardous Components Specific Chemical Identity (Common Name)	Common Name	OSHA PEL	ACGIH TLV	Range Percent by Weight
Lead, CAS #7439921	Negative Electrode and Grid	0.05 mg/m^3	0.15 mg/m^3	48-53% wt
Sulfuric Acid, CAS #7664939	Electrolyte	1.00 mg/m^3	1.00 mg/m^3	7-10% wt

Percentages of components are dependant both on the model of the battery and stets of charge/discharge of the battery.

Inorganic lead and electrolyte (sulphuric acid) are the primary components of every battery manufactured by HOPPECKE Batterien GmbH & CO. KG.
Other ingredients may be present dependent upon battery type. Contact your HOPPECKE Batterien GmbH & CO. KG representative for additional information.

Under normal use and handling the customer has no contact with the internal components of the battery or the chemical hazards. Under normal use and handling these batteries do not emit regulated or hazardous substances. Warning: Battery terminals posts and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and reproductive harm. Wash hands thoroughly after working with batteries and

before eating, drinking or smoking.

3. PHYSICAL / CHEMICAL CHARACTERISTICS

Electrolyte (Sulfuric Acid):
See enclosed MSDS electrolyte

Lead:
See enclosed MSDS lead

4. FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	non flammable
Flammable Limits:	*Hydrogen Gas
Extinguishing Media:	Class ABC extinguisher,
Limits:	LEL = 4.1% (Hydrogen Gas) UEL = 74.2%

NOTE: CO_2 may be used, but not directly on the cell. The thermal shock may cause cracking of the battery case and/or cases.
Hydrogen gas may be generated during battery charging.

Special Fire Fighting Procedures: If batteries are on charge, turn off power. Use positive pressure, self-contained breathing apparatus in fighting fire. Water applied to electrolyte generates heat and causes it to splatter. Wear acid resistant clothing. Ventilate area well.

Unusual Fire and Explosion Hazards: Hydrogen and oxygen gases are generated in cells during normal battery operation or when on charge. (Hydrogen is flammable and oxygen supports combustion). These gases enter the air through the vent caps during battery overcharging. To avoid risk of fire or explosion, keep sparks and other sources of ignition away from the battery. Do not allow metal objects to simultaneously contact both positive and negative terminal of batteries. Ventilate area well.

5. REACTIVITY DATA

Stability: Stable
Condition to Avoid: Prolonged overcharging, sources of ignition

Incompatibility (Materials to Avoid): Sulfuric Acid: Contact with combustibles and organic materials may cause fire and explosion. Also reacts violently with strong reducing agents, metals, strong oxidizers and water. Contact with metals may produce toxic sulfur dioxide fumes and may release flammable hydrogen gas. Combination of Sulfuric acid with combustibles and organic materials may cause fire and explosion. Avoid strong reducing agents, most metals, carbides, chlorates, nitrates, picrate.

Hazardous Decomposition Products: Sulfuric Acid: Excessive overcharging or fire may create sulfur trioxide, carbon monoxide, sulfuric acid mist and sulfur dioxide.
Lead Compounds: Contact with strong acid or base or presence of nascent hydrogen may generate highly toxic arsine gas.

Hydrogen gas may be generated in an overcharged condition, in fire or at very high temperatures. CO, CO_2, and sulfur oxides may emit in fire. Hazardous polymerization will not occur.

6. HEALTH HAZARD DATA

See enclosed MSDS Acid, Lead

7. PRECAUTIONS FOR SAFE HANDLING AND USE

Steps to be Taken in Case Material is Released or Spilled: Electrolyte material is corrosive. Contains sulfuric acid. Neutralize any spilled material. Reference 1996 North American Emergency Response Guidebook, #154.

Waste Disposal Method: Lead-acid batteries are completely recyclable. For information on returning batteries to HOPPECKE Batterien GmbH & Co. KG for recycling, contact your HOPPECKE Representative. Dispose of any collected material in accordance with local, state or applicable federal regulations.

Precautions to be Taken in Handling and Storing: Store away from reactive material as defined in Section V, Reactivity Data. Place cardboard between layers of stacked batteries to avoid damage and short circuit. Do not allow metallic materials to simultaneously contact both terminals.

Other Precautions: If battery case is broken, avoid direct contact with internal components. Keep away from ignition sources during charging.

8. CONTROL MEASURES

Respiratory Protection (Specific Type): N/A
Ventilation: Must be provided when charging in an enclosed area.
Protective Gloves: Recommended
Eye Protection: Recommended
Other Protective Clothing or Equipment: N/A
Work Hygienic Practices: Good Personal hygiene and work practices are recommended.

9. Transportation

Herewith we, HOPPECKE Batterien GmbH & Co. KG confirm, that one battery extensive corresponding to the type series **trak.bloc/solar.bloc** has been tested by the laboratories of IABG and passed all tests

acc. to IMDG regulation **special provision 238 IMDG**

acc. to IATA regulation **special provision A67 IATA**

successfully.

Transport regulations for hazardous substances contained

Cargo freights ADR/RID and GGVS/GGVE (transborder/national):

ADR/RID-GGVS/E class	8
UN-Number	UN 2800
Label	8
Technical name	batteries, wet, non-spillable
Specifics	Due to passed tests and special provision 238 ADR the product named above is no dangerous goods for road transport.

Maritime transports IMDG/GGVSee:

IMDG/GGVSee-class	8
UN-Number	UN 2800
Label	8
Technical name	batteries, wet, non-spillable
Specifics	Due to passed tests and special provision 238 IMDG the product named above is no dangerous goods on maritime transports.

Aerial transportation ICAO-TI and IATA-DGR:

ICAO/IATA-class	8
UN/ID-Number	UN 2800
Label	8
Technical name	batteries, wet, non-spillable
Specifics	Due to passed tests and special provision A67 IATA the product named above is no dangerous goods on air cargo.

The provisions of this code shall not apply to leak-proof batteries if at a temperature of 55 ° C in the case of a housing collapse, or a crack in the casing, the electrolyte can not spill, no free liquid which could leak is present, and the batteries are ready for despatch and secured against short circuit.