

MSDS Report

Prepared For : 申请商:	Timotion Technology Co., Ltd. 东莞堤摩讯传动科技有限公司 Shiyong Minying Industrial Zone, Hengli Town, Dongguan City, Guangdong, China 东莞市横沥镇石涌民营工业区
Product Name: 产品名称:	TBB2 control box (Containing lead-acid battery XT1213) TBB2 控制箱 (含铅酸蓄电池 XT1213)
Model : 型号:	TBB2
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Material Safety Data Sheet

化学品安全技术说明书

Section 1- Chemical Product & Company Identification

第一部分 化学品及企业标识

Product Name: TBB2 control box (Containing lead-acid battery XT1213)

产品名称: TBB2 控制箱 (含铅酸蓄电池 XT1213)

Manufacture: Timotion Technology Co., Ltd.

制造商: 东莞堤摩讯传动科技有限公司

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Section 2- Hazards Identification

第二部分 危险性概述

Hazard class and label elements of the substance according to GHS:

根据 GHS, 该物质的危害类别和标签元素:

GHS hazard class

GHS 危害类别

Health hazard(s) 健康危害	Skin corrosion/irritation 皮肤腐蚀/过敏	category1 类别 1
	Reproductive toxicity 生殖毒性	category1 类别 1
	Specific target organ toxicity, repeated exposure 特定靶器官毒性，反复暴露	category2 类别 2
Environmental hazard(s)环境危害	Hazardous to the aquatic environment, long-term hazard 对水生环境有害，长期危害	category1 类别 1
Pictogram 象形图		
Signal 信号	Danger 危险	
Hazard statement(s) 危害描述	H314 Causes severe skin burns and eye damage 会导致严重的皮肤灼伤和眼睛损伤 H360 May damage fertility or the unborn child 可能会损害生育能力或未出生的婴儿 H373 May cause damage to organs through prolonged or repeated exposure 可通过长时间或多次接触对器官造成损害 H410 Very toxic to aquatic life with long lasting effects 对水生生物有极高毒性，影响持久	
Precautionary statements 预防说明		
Prevention 预防	P260 Do not breathe dust/fume/gas/mist/vapours/spray. 不要吸入灰尘/油烟/气体/薄雾/蒸汽/喷雾。 P264 Wash thoroughly after handling. 处理后彻底清洗。 P273 Avoid release to the environment. 避免释放到环境中。 P280 Wear protective gloves/protective clothing/eye protection/face protection.穿戴防护手套/防护服/护眼/护面。	
Response 反应	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. 如果吞食：漱口，不要引起呕吐。 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. 如果皮肤(或头发)上有：立即脱下所有受污染的衣服。用水[或淋浴]冲洗皮肤。 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. 如果吸入：将人移至新鲜空气中，保持呼吸舒适。 P305+P351+P338 IF IN EYES: Rinse cautiously with water for	

several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 如果进入眼睛：小心地用水冲洗几分钟。如果存在而且容易做到，摘除隐形眼镜，继续冲洗。

P308+P313 IF exposed or concerned: Get medical advice/ attention. 如果暴露或有关：寻求医疗建议/注意。

P314 Get medical advice/attention if you feel unwell. 如果你感到不舒服，请就医。

P363 Wash contaminated clothing before reuse. 清洗污染的衣物后再使用。

P391 Collect spillage. 收集溢出。

Section 3- Composition/Information on Ingredients

第三部分 成分/组成信息

Chemical Name 化学名称	Concentration or concentration ranges (%) 浓度或浓度范围(%)	CAS Number CAS 号 (化学文摘索引登记号)
Lead Dioxide 二氧化铅	1309-60-0	32
Lead 铅	7439-92-1	31.1
Dilute Sulfuric acid 稀硫酸	7664-93-9	20
ABS plastic ABS 塑料	9003-56-9	13
Glass Fiber 玻璃纤维	60676-86-0	2
Epoxy resin 环氧树脂	N/A	1.5
Other 其他	N/A	0.4

Note: CAS number is Chemical Abstract Service Registry Number.

注意：CAS 号是化学文摘服务注册号。

N/A=Not apply.

N/A =不适用。

Section 4- First Aid Measures

第四部分 急救措施

After skin contact	Take off the contaminated clothing and shoes immediately.
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皮肤接触后	Wash off with soap and plenty of water. Consult a physician. 立即脱掉被污染的衣物和鞋子。用肥皂和大量的水洗掉。咨询医生。
After eye contact 眼睛接触后	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. 用大量清水彻底冲洗至少 15 分钟，并咨询医生。
After ingestion 摄入后	Please rinse mouth thoroughly with water. Induce vomiting under the guidance of professional personage. Please seek medical treatment in time. 立即用清水漱口，在专业人士的指导下催吐，速就医。
After inhalation 吸入后	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. 如果吸入，就把人移到新鲜空气中。如果没有呼吸，进行人工呼吸。咨询医生。

Section 5- Fire Fighting Measures

第五部分 消防措施

Hazardous products of combustion 燃烧危险产物	Lead oxides, sulphur oxides. 铅氧化物，硫氧化物。
Extinguishing method 灭火方法	Use Dry powder, foam or Carbon dioxide for extinction. 使用干粉、泡沫或二氧化碳灭火。
Special protective equipment 特殊的防护设备	Wear self contained breathing apparatus for fire fighting if necessary. 如有需要，应佩戴自给式消防呼吸器。

Section 6- Accidental Release Measures

第六部分 泄露应急处理

Personal protective measures 个人防护措施	Wear acid-resistant clothing, boots, gloves, and face shield. 穿戴耐酸衣物、靴子、手套和面罩。
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Environmental protective measures 环境保护措施	Prevent the spills inflow to a sewer and then place in suitable container. 防止溢出物流入下水道，然后放置在合适的容器中。
Methods for taking in and cleaning up 吸收和清理的方法	Contain/absorb small spills with dry sand, earth, and vermiculite. 用干燥的沙子，泥土，和蛭石容纳/吸收小溢出。 Do not use combustible materials. If possible, carefully neutralize spilled electrolyte with soda ash, sodium bicarbonate, lime, etc. 不要使用易燃材料。如果可能的话，用纯碱、碳酸氢钠、石灰等小心地中和泄漏的电解液。

Section 7- Handling and Storage

第七部分 操作处置与储存

Handling 操作	Use personal protective equipment. Ensure adequate ventilation. Keep away from sources of ignition – No smoking. Avoid contacting with skin and eye. 使用个人防护装备。确保足够的通风。远离火源-禁止吸烟。避免接触皮肤和眼睛。
Storage 储存	Store in a cool (10~40°C), dry area away from combustible materials. Do not store in sealed, unventilated areas. Avoid overheating and overcharging. 储存在阴凉(10~40°C)干燥区域，远离易燃材料。不要存放在密封、不通风的地方。避免过热和过充。

Section 8 - Exposure Controls/Personal Protection

第八部分 接触控制和个体防护

Engineering Controls 工程控制	Safety shower and eye bath. Mechanical exhaust required. 有安全淋浴和眼浴，机械排风。
Respiratory protection 呼吸防护	Use a full-face supplied air respirator. 使用全面供气呼吸器。
Eye protection 眼睛防护	Wear chemical goggles. 戴上化学护目镜。
Hand Protection	Wear impervious chemical resistant gloves.

手防护	戴上防化学渗透的手套。
Body protection 身体防护	Protective work clothing. 穿防护服。

Section 9- Physical and Chemical Properties

第九部分 理化特性

Appearance and properties 外观和特性	Outside: Gray plastic shell 外部: 灰色塑料外壳 Inside: Sulfuric acid, colorless liquid. 内部: 硫酸, 无色液体。
Odor 气味	Odorless 无气味
Odor threshold 嗅觉阈值	No data available 无数据可提供
PH value PH 值	No data available 无数据可提供
Melting point/freezing point 熔点/凝固点	No data available 无数据可提供
Boiling Point, initial boiling point and Boiling range 沸点, 初始沸点和沸点范围	No data available 无数据可提供
Flash Point 闪点	No data available 无数据可提供
Evaporation Rate 蒸发率	No data available 无数据可提供
Flammability 易燃性	No data available 无数据可提供
Upper explosive limit 爆炸上限	No data available 无数据可提供
Lower explosive limit 爆炸下限	No data available 无数据可提供
Vapor Pressure 蒸汽压	No data available 无数据可提供
Vapor Density 蒸汽密度	No data available 无数据可提供

Density/relative density 密度/相对密度	No data available 无数据可提供
Solubility in Water 水溶性	No data available 无数据可提供
Octanol/water partition coefficient 辛醇/水分配系数	No data available 无数据可提供
Auto-ignition temperature 自燃温度	No data available 无数据可提供
Decomposition temperature 分解温度	No data available 无数据可提供
Viscosity 粘度	No data available 无数据可提供

Section 10 – Stability and Reactivity

第十部分 稳定性和反应性

Reactivity 反应性	No data available 无数据可提供
Chemical stability 化学稳定性	Stable under the condition recommended. 普通条件下是稳定的。
Possibility of hazardous reaction 危险反应的可能性	No data available 无数据可提供
Conditions to avoid 应避免的条件	Sparks and other sources of ignition. Prolonged overcharge. Fire or explosion hazard due to possible hydrogen gas generation. 火花和其他引燃源。长时间的过度充电。可能产生氢气而引致火警或爆炸的危险。
Incompatible materials 不兼容的材料	Bases, Halides, Organic materials, Carbides, fulminates, Nitrates, picrates, Cyanides, Chlorates, alkali halides, Zinc salts, permanganates, Hydrogen peroxide, Azides, Perchlorates, Nitromethane, phosphorous, cyclopentadiene, cyclopentanone oxime, nitroaryl amines, hexalithium disilicide,

	phosphorous(III) oxide, Powdered metals. 碱，卤化物，有机物，碳化物，叶酸盐，硝酸盐，苦味酸盐，氰化物，氯酸盐，卤化碱，锌盐，高锰酸盐，过氧化氢，叠氮化物，高氯酸盐，硝基甲烷，磷，环戊二烯，环戊酮肟，硝基芳基胺，六硅化二硅化磷，磷（III）氧化物，金属粉末。
Hazardous decomposition products 危险分解产品	No data available 无数据可提供

Section 11 – Toxicological Information

第十一部分 毒理学信息

Acute toxicity 急性毒性	Sulfuric Acid: LD50(rat, Oral) 2140mg/kg; LC50(rat, Inhalation, 2h) 0.51 mg/L 硫酸: LD50(大鼠, 口服)2140mg/kg; LC50(大鼠, 吸入, 2h) 0.51 mg/L
Skin corrosion/irritation 皮肤腐蚀/过敏	No data available 无数据可提供
Serious eye damage/eye irritation 严重眼睛损伤/眼睛刺激	No data available 无数据可提供
Respiratory or skin sensitization 呼吸或皮肤敏感	No data available 无数据可提供
Germ cell mutagenicity 生殖细胞诱变	No data available 无数据可提供
Carcinogenicity 致癌性	Lead (CAS No. 7439-92-1): Group 2B Possibly carcinogenic to humans; 铅 (CAS 号 7439-92-1): 2B 组可能对人类致癌; Sulfuric acid (CAS No. 7664-93-9): Group 1 Carcinogenic to humans (IARC); 硫酸 (CAS 编号 7664-93-9): 第 1 组对人类致癌 (IARC);

	Lead dioxide (CAS No. 1309-60-0): No data available 二氧化铅 (CAS 号 1309-60-0): 无数据可提供
Reproductive toxicity 生殖毒性	No data available 无数据可提供
Specific target organ toxicity – single exposure 特定靶器官毒性-单次暴露	No data available 无数据可提供
Specific target organ toxicity – repeated exposure 特定靶器官毒性-反复暴露	No data available 无数据可提供
Aspiration hazard 吸入危害	No data available 无数据可提供

Section 12-Ecological Information

第十二部分 生态学信息

Toxicity 毒性	No data available 无数据可提供
Persistence and Degradability 持久性和降解性	No data available 无数据可提供
Bioaccumulative potential 生物蓄积潜力	No data available 无数据可提供
Mobility in soil 土壤中移动性	No data available 无数据可提供
Other adverse effects 其他不良反应	Very toxic to aquatic life with long lasting effects. 对水生生物有剧毒，并具有长期持续影响。

Section 13 – Disposal Considerations

第十三部分 废弃处置

Property of waste: 废物性质:	Neutralized acid may be flushed down the sewer. Spent batteries must be treated as hazardous waste and disposed of according to local state, and federal regulations. A copy of this material safety date must be supplied to any scrap dealer or secondary smelter with battery. 中和的酸可能会冲入下水道。废旧电池必须视为危险废物，并应根据当地州和联邦法规进行处理。该材料安全日期的副本必须提供给任何废料经销商或带有电池的二次冶炼厂。
Methods of disposal: 处置方法:	Dispose of in a manner consistent with federal, state, and local regulations. 以符合联邦，州和地方法规的方式进行处置。
Precautions of disposal: 处置注意事项:	No data available 无数据可提供

Section 14 – Transport Information

第十四部分 运输信息

The battery has passed the Vibration test, Pressure differential test, and Leakage test at 55°C according to United Nations “Recommendations on the Transport of Dangerous Goods Model Regulations” (21st revised edition) Chapter 3.3, Article 238.

根据联合国“关于危险货物运输的建议书 规章范本”（第 21 修订版）第 238 章，该电池已通过了振动测试，压差测试和 55°C 高温漏液测试。

IATA: The battery is NOT RESTRICTED according to IATA DGR 61st Edition special provision A67.

IATA: 根据 IATA DGR 第 61 版特别规定 A67，该电池不受限制。

IMO: The battery is NOT RESTRICTED according to IMDG CODE (inc Amdt 39-18) special provision 238.

IMO: 根据 IMDG CODE (inc Amdt 39-18) 特殊规定 238，该电池不受限制。

Section 15 – Regulatory Information**第十五部分 法规信息**

Component 成分	CHINA	TSCA	ENCS	EINECS
Lead 铅	√	√	√	√
Sulfuric acid 硫酸	√	√	√	√
Lead dioxide 二氧化铅	-	-	√	√

Note 1: 注 1:

CHINA - China Inventory of Existing Chemical Substances (IECSC)

CHINA - 中国现有化学物质清单 (IECSC)

TSCA - United States Inventory of Toxic Substances Control Act Chemical Substances (TSCA)

TSCA - 美国有毒物质控制法化学物质清单 (TSCA)

ENCS - Japan Existing and New Chemical Substances (ENCS)

ENCS - 日本现有和新化学物质 (ENCS)

EINECS - European Inventory of Existing Commercial Chemical Substances (EINECS)

EINECS - 欧洲现有商业化学物质清单 (EINECS)

Note 2: 注 2:

"√" Indicates that the substance included in the regulations

"√" 表示法规中包含的物质

"-" That no data or included in the regulations

"-" 没有数据或未包含在法规中

Section 16 – Additional Information**第十六部分 其他信息**

The information above is believed to be accurate and represents the best information currently available to us. However, we makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. Although reasonable precautions

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