

Safety Data Sheet

化学品安全技术说明书

(According to Regulation (EC) No. 1907/2006 (REACH)
and its amendment Regulation (EU) 2020/878)
符合(EC) No. 1907/2006 (REACH)法规及其(EU) 2020/878 修正法规.

Applicant 申请人: TALARIA POWER TECH (CHONGQING) CO., LTD.
探骊动力科技(重庆)有限公司

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Attn. 联系人: Mr. Wang Fan
Mr. 王凡

Sample Description 样品描述: Rechargeable Li-ion Battery
可充电锂离子电池

Model No. 型号: DM4471608

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

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Scarlett Liang
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Disclaimer Measurement Uncertainty: Unless otherwise agreed upon, pass or fail verdicts are given based on the measured values without consideration of measurement uncertainties. Please note, every test method has a measurement uncertainty which has been evaluated by the laboratory according to ISO IEC 17025 requirements. By taking measurement uncertainties into account it might happen that measured values can neither be assessed as pass or fail.

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SECTION 1: Identification of the substance/mixture and of the company/undertaking

第 1 部分: 物质/配制品名称和公司名称

1.1. Product identifier

1.1. 产品标识符

Product form	: Article
产品形态	: 制品
Trade name	: Rechargeable Li-ion Battery
产品名称	: 可充电锂离子电池
Model No	: DM4471608
型号	:

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2. 物质或混合物的相关指定用途及其建议避免的用途

1.2.1. Relevant identified uses

1.2.1. 重要特征用途

Use of the substance/mixture	: Energy supply
物质/混合物的用途	: 能量供应

1.2.2. Uses advised against

1.2.2. 禁止用于

Restrictions on use	: No information available
使用限制	: 无相关信息

1.3. Details of the supplier of the safety data sheet

1.3. 安全数据表的供应商信息

Supplier

供应商

TALARIA POWER TECH (CHONGQING) CO., LTD.
探骊动力科技(重庆)有限公司
No.2 Xiangyu Road, Shuangfengqiao Street, Yubei District
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重庆市渝北区双凤桥街道翔宇路 2 号
401120
T 18523831729
tech@talaria.cn

1.4. Emergency telephone number

1.4. 应急咨询电话

Emergency number	: 18523831729
应急咨询电话	:

SECTION 2: Hazards identification

第 2 部分: 危险性概述

2.1. Classification of the substance or mixture

2.1. 物质或混合物分类

Classification according to Regulation (EC) No. 1272/2008 [CLP]

根据 Regulation (EC) No. 1272/2008 [CLP]分类

Not classified
非此类

Adverse physicochemical, human health and environmental effects

理化、人体健康和环境的有害影响

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

就我们所知, 在遵守工业安全卫生规则的条件下, 本产品不具特殊风险。

2.2. Label elements

2.2. 标签要素

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

根据 Regulation (EC) No. 1272/2008 [CLP]标签

Hazard pictograms (CLP)	: None
象形图 (CLP)	: 无
Signal word (CLP)	: None
警示词 (CLP)	: 无
Hazard statements (CLP)	: Not applicable
危险性说明 (CLP)	: 不适用
Precautionary statements (CLP)	: Not applicable
防范说明 (CLP)	: 不适用
EUH-statements	: None.
EUH 术语	: 无

2.3. Other hazards

2.3. 其他危害

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

不含根据 REACH 附录 XIII 评估 $\geq 0.1\%$ 的 PBT/vPvB 物质

The mixtures is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

该产品因不具有内分泌干扰特性所以未纳入根据 REACH 第 59(1) 条所建立的清单, 或根据欧委会授权条例 (EU) 2017/2100 或欧委会条例 (EU) 2018/605 中所述的标准, 被鉴定为不具有内分泌干扰特性

SECTION 3: Composition/information on ingredients

第 3 部分: 组成/成分信息

3.1. Substances

3.1. 物质

Not applicable.
不适用。

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3.2. Mixtures
3.2. 混合物

Name 名称	Product identifier 产品标识符	%	Classification according to Regulation (EC) No. 1272/2008 [CLP] 根据 Regulation (EC) No. 1272/2008 [CLP]分类
Cobalt lithium manganese nickel oxide 钴锂锰镍的氧化物	CAS-No.: 182442-95-1 CAS 编号: 182442-95-1	0 – 80	Not classified 非此类
Carbon 碳	CAS-No.: 7440-44-0 CAS 编号: 7440-44-0 EC-No.: 231-153-3;931-328-0 EC 编号: 231-153-3;931-328-0	10 – 30	Not classified 非此类
Phosphate(1-), hexafluoro-, lithium 六氟磷酸锂	CAS-No.: 21324-40-3 CAS 编号: 21324-40-3 EC-No.: 244-334-7 EC 编号: 244-334-7	10 – 20	Acute Tox. 3 (Oral), H301 急毒性 3 类 (口服), H301 Skin Corr. 1A, H314 皮肤腐蚀 1A 类, H314 Eye Dam. 1, H318 严重眼损伤 1 类, H318 STOT RE 1, H372 特定目标器官毒性-多次接触 1 类, H372
Copper 铜	CAS-No.: 7440-50-8 CAS 编号: 7440-50-8 EC-No.: 231-159-6 EC 编号: 231-159-6 EC Index-No.: 029-024-00-X EC 索引号: 029-024-00-X	2 – 10	Aquatic Chronic 2, H411 危害水生环境-长期危险 2 类, H411
Aluminum 铝	CAS-No.: 7429-90-5 CAS 编号: 7429-90-5 EC-No.: 231-072-3 EC 编号: 231-072-3 EC Index-No.: 013-002-00-1 EC 索引号: 013-002-00-1	2 – 10	Flam. Sol. 1, H228 易燃固体 1 类, H228 Water-react. 2, H261 遇水放出易燃气体的物质和混合物 2 类, H261
1,1-Difluoroethylene polymer 聚偏氟乙烯树脂	CAS-No.: 24937-79-9 CAS 编号: 24937-79-9 EC-No.: 607-458-6 EC 编号: 607-458-	5	Not classified 非此类
Styrene-butadiene copolymer 苯乙烯-丁二烯的聚合物	CAS-No.: 9003-55-8 CAS 编号: 9003-55-8 EC-No.: 618-370-2 EC 编号: 618-370-2	1	Not classified 非此类

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

第 4 部分: 急救措施

4.1. Description of first aid measures

4.1. 急救措施

First-aid measures after inhalation 吸入后的急救措施	: Not an expected route of exposure. : 不是预期的暴露途径。
First-aid measures after skin contact 皮肤接触后的急救措施	: Wash skin with plenty of water. : 用大量清水清洗皮肤。
First-aid measures after eye contact 眼睛接触后的急救措施	: Not an expected route of exposure. : 不是预期的暴露途径。
First-aid measures after ingestion 食入后的急救措施	: Not an expected route of exposure. Call a poison center or a doctor if you feel unwell. : 不是预期的暴露途径, 如感觉不适, 呼叫解毒中心或医生。

4.2. Most important symptoms and effects, both acute and delayed

4.2. 最重要的急性或延迟发生的症状及后果

Symptoms/effects 症状/后果	: No additional information available : 没有更进一步的信息
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4.3. Indication of any immediate medical attention and special treatment needed

4.3. 关于紧急医疗救助或特殊处理的提示

Treat symptomatically.
对症治疗。

SECTION 5: Firefighting measures

第 5 部分: 消防措施

5.1. Extinguishing media

5.1. 灭火剂

Suitable extinguishing media 适用灭火剂	: Water spray. Dry powder. Foam. : 雾状水。干粉。泡沫。
Unsuitable extinguishing media 不适用灭火剂	: No information available. : 无相关信息。

5.2. Special hazards arising from the substance or mixture

5.2. 由物质或混合物带来的特殊危险

Hazardous decomposition products in case of fire 燃烧时可能产生的有毒有害燃烧产物	: Toxic fumes may be released. : 可能释放有毒烟雾。
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5.3. Advice for firefighters

5.3. 灭火注意事项及防护措施

Firefighting instructions 灭火方法	: Cool down the containers exposed to heat with a water spray. Do not allow run-off from fire fighting to enter drains or water courses. Eliminate every possible source of ignition. Approach from upwind. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to a safe area. Avoid contact with skin and eyes. 用水喷雾冷却暴露在高温下的容器。不要让灭火的水流入排水渠或水道。消除所有可能的火源。方法从逆风。确保通风良好，特别是在密闭区域。将人员疏散到安全区域。避免接触皮肤和眼睛。
Protection during firefighting 消防人员应穿戴的个体防护装备	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. : 不得在没有适当防护装备的情况下尝试采取行动。独立的呼吸防护装置。完整的身体防护。

SECTION 6: Accidental release measures

第 6 部分: 泄漏应急处理

6.1. Personal precautions, protective equipment and emergency procedures

6.1. 作业人员防护措施、防护装备和应急处置程序

6.1.1. For non-emergency personnel

6.1.1. 非应急人员

Emergency procedures 应急处置程序	: Ventilate spillage area. Access forbidden to unauthorised personnel. Avoid contact with eyes, skin and clothing. Do not touch or walk on the spilled product. Eliminate all ignition sources if safe to do so. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to a safe area. First aid personnel should wear appropriate protective equipment during any rescue. Handle in accordance with good industrial hygiene and safety procedures. In case of fire: stop leak if safe to do so. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Only qualified personnel equipped with suitable protective equipment may intervene. Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Remove all sources of ignition. Remove person to uncontaminated area. Stay upwind/keep distance from source. Take action to prevent static discharges. Use personal protective equipment as required. 对泄漏区域进行通风。禁止未经授权人员进入。避免接触眼睛、皮肤和衣服。不要触摸或走在溢出的产品上。如果安全的话，消除所有的火源。确保通风良好，特别是在密闭区域。将人员疏散到安全区域。急救人员在任何救援过程中都应穿戴适当的防护装备。按照良好的工业卫生和安全程序进行处理。万一发生火灾:在安全的情况下制止泄漏。远离热源、热表面、火花、明火和其他火源。禁止吸烟。只有配备了适当防护装备的合格人员才能介入。在安全的情况下防止进一步泄漏或溢出。不要让产品进入排水管。必须避免排放到环境中。清除所有点火源。把人转移到未污染区域。保持逆风/远离源头。采取措施防止静电放电。按要求使用个人防护装备。
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6.1.2. For emergency responders

6.1.2. 应急人员

Protective equipment 防护装备	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". : 不得在没有适当防护装备的情况下尝试采取行动。更多信息请参考第 8 部分“接触控制/个体防护”。
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6.2. Environmental precautions

6.2. 环境保护措施

Avoid release to the environment.
避免释放到环境中。

6.3. Methods and material for containment and cleaning up

6.3. 遏制和清洁的方法与材料

For containment 控制方法	: Collect spillage. 收集溢出物。
Methods for cleaning up 清除方法	: Mechanically recover the product. Absorb spillage to prevent material damage. Place in an appropriate container and dispose of the contaminated material at a licensed site. Absorb and/or contain spill with inert material (sand, vermiculite or other appropriate material), then place in suitable container. Collect all waste in suitable and labelled containers and dispose according to local legislation. 以机械方式回收产品。吸收溢出物，防止材料损坏。放置在适当的容器内，并在持牌地点处理受污染的物料。用惰性材料(沙子、蛭石或其他合适的材料)吸收和/或容纳溢出物，然后放入合适的容器中。将所有废物收集在适当及贴有标签的容器内，并按当地法例处置。
Other information 其他信息	: Dispose of materials or solid residues at an authorized site. 在受许可的地点处置固体物质或残留物。

6.4. Reference to other sections

6.4. 参照其他部分

For further information refer to section 13.
更多信息请参考第 13 部分。

SECTION 7: Handling and storage

第 7 部分: 操作处置与储存

7.1. Precautions for safe handling

7.1. 安全操作的防护措施

Precautions for safe handling 安全操作的防护措施	: Ensure good ventilation of the work station. Wear personal protective equipment. Do not open, destroy, or incinerate batteries because the battery may explode, break, or vent during these processes. Do not short-circuit the battery, overcharge, forced discharge or thrown into the fire. Do not squeeze the battery or immerse the battery in the solution. Avoid contact with eyes, skin and clothing. Do not breathe gas/fumes/vapour/spray. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from heat and direct sunlight. 确保工作点通风良好。配戴个人防护装备。不要打开、破坏或焚烧电池，因为在这些过程中电池可能会爆炸、破裂或排气。禁止电池短路、过度充电、强行放电或将其投入火坑。请勿挤压电池或将电池浸入溶液中。避免接触眼睛、皮肤和衣物。不要吸入气体/烟雾/蒸汽/喷雾。远离热源、热表面、火花、明火和其他点火源。禁止吸烟。避免高温和阳光直射。
Hygiene measures 卫生措施	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. 使用本产品时不要进食、饮水或吸烟。接触本产品后务必洗手。

7.2. Conditions for safe storage, including any incompatibilities

7.2. 安全存放的条件，包括一切不相容性

Storage conditions : Avoid high temperatures. Keep away from heat and direct sunlight. Store in a dry, cool and well-ventilated place. Protect from moisture. Avoid shorting.
储存条件 : 避免高温。远离热源和阳光直射。储存于干燥、阴凉及通风良好的地方。避免受潮。避免短路。

7.3. Specific end use(s)

7.3. 特殊终端用途

No additional information available.
没有更进一步的信息。

SECTION 8: Exposure controls/personal protection

第 8 部分: 接触控制/人身保护

8.1. Control parameters

8.1. 控制参数

8.1.1 National occupational exposure and biological limit values

8.1.1 国家职业接触限值和生物限值

Copper (7440-50-8) 铜 (7440-50-8)	
EU - Indicative Occupational Exposure Limit (IOEL) EU - 提示性职业暴露限值 (IOEL)	
Local name 本地名称	Copper 铜
IOEL TWA IOEL TWA	0.01 mg/m ³ (respirable fraction) 0.01 mg/m ³ (可吸入部分)
Remark 特别记载事项	(Year of adoption 2014) (采用年份 2014)
Regulatory reference 标准来源	SCOEL Recommendations SCOEL 建议
Austria - Occupational Exposure Limits 奥地利 - 职业接触限值	
MAK (OEL TWA) MAK (OEL TWA)	1 mg/m ³ (inhalable fraction) 1 mg/m ³ (可吸入部分) 0.1 mg/m ³ (respirable fraction, smoke) 0.1 mg/m ³ (可吸入部分, 烟雾)
MAK (OEL STEL) MAK (OEL STEL)	4 mg/m ³ (inhalable fraction) 4 mg/m ³ (可吸入分数) 0.4 mg/m ³ (respirable fraction, smoke) 0.4 mg/m ³ (可吸入部分, 烟雾)

Copper (7440-50-8) 铜 (7440-50-8)	
Belgium - Occupational Exposure Limits 比利时 - 职业接触限值	
OEL TWA OEL TWA	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾) 1 mg/m ³ (dust and mist) 1 mg/m ³ (粉尘和雾)
Bulgaria - Occupational Exposure Limits 保加利亚 - 职业接触限值	
OEL TWA OEL TWA	0.1 mg/m ³ (metal vapor) 0.1 mg/m ³ (金属蒸气)
Croatia - Occupational Exposure Limits 克罗地亚 - 职业接触限值	
GVI (OEL TWA) [1] GVI (OEL TWA) [1]	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾) 1 mg/m ³ (dust) 1 mg/m ³ (粉尘)
KGVI (OEL STEL) KGVI (OEL STEL)	2 mg/m ³ (dust) 2 mg/m ³ (粉尘)
Czech Republic - Occupational Exposure Limits 捷克共和国 - 职业接触限值	
PEL (OEL TWA) PEL (OEL TWA)	1 mg/m ³ (dust) 1 mg/m ³ (粉尘) 0.1 mg/m ³ (fume) 0.1 mg/m ³ (烟雾)
Denmark - Occupational Exposure Limits 丹麦 - 职业接触限值	
OEL TWA [1] OEL TWA [1]	1 mg/m ³ (dust and powder) 1 mg/m ³ (粉尘和粉末) 0.1 mg/m ³ (fume) 0.1 mg/m ³ (烟雾)
Estonia - Occupational Exposure Limits 爱沙尼亚 - 职业接触限值	
OEL TWA OEL TWA	1 mg/m ³ (total dust) 1 mg/m ³ (总尘量) 0.2 mg/m ³ (respirable dust) 0.2 mg/m ³ (呼吸性粉尘)
Finland - Occupational Exposure Limits 芬兰 - 职业接触限值	
HTP (OEL TWA) [1] HTP (OEL TWA) [1]	0.02 mg/m ³ (respirable dust) 0.02 mg/m ³ (呼吸性粉尘)

Copper (7440-50-8) 铜 (7440-50-8)	
France - Occupational Exposure Limits 法国 - 职业接触限值	
VME (OEL TWA) VME (OEL TWA)	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾) 1 mg/m ³ (dust) 1 mg/m ³ (粉尘)
VLE (OEL C/STEL) VLE (OEL C/STEL)	2 mg/m ³ (dust) 2 mg/m ³ (粉尘)
Greece - Occupational Exposure Limits 希腊 - 职业接触限值	
OEL TWA OEL TWA	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾) 1 mg/m ³ (dust) 1 mg/m ³ (粉尘)
OEL STEL OEL STEL	2 mg/m ³ (dust) 2 mg/m ³ (粉尘)
Hungary - Occupational Exposure Limits 匈牙利 - 职业接触限值	
AK (OEL TWA) AK (OEL TWA)	0.1 mg/m ³ 0.1 mg/m ³ 0.01 mg/m ³ (fume) 0.01 mg/m ³ (烟雾)
CK (OEL STEL) CK (OEL STEL)	0.2 mg/m ³ 0.2 mg/m ³
Ireland - Occupational Exposure Limits 爱尔兰 - 职业接触限值	
OEL TWA [1] OEL TWA [1]	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾) 1 mg/m ³ (dusts and mists) 1 mg/m ³ (粉尘和雾)
OEL STEL OEL STEL	2 mg/m ³ (dusts and mists) 2 mg/m ³ (粉尘和雾) 0.6 mg/m ³ (calculated-fume) 0.6 mg/m ³ (计算出的-烟雾)
Latvia - Occupational Exposure Limits 拉脱维亚 - 职业接触限值	
OEL TWA OEL TWA	0.5 mg/m ³ 0.5 mg/m ³

Copper (7440-50-8) 铜 (7440-50-8)	
Lithuania - Occupational Exposure Limits 立陶宛 - 职业接触限值	
IPRV (OEL TWA) IPRV (OEL TWA)	1 mg/m ³ (inhalable fraction) 1 mg/m ³ (可吸入分数) 0.2 mg/m ³ (respirable fraction) 0.2 mg/m ³ (可吸入部分)
Netherlands - Occupational Exposure Limits 荷兰 - 职业接触限值	
TGG-8u (OEL TWA) TGG-8u (OEL TWA)	0.1 mg/m ³ (inhalable dust) 0.1 mg/m ³ (可吸入性粉尘)
Poland - Occupational Exposure Limits 波兰 - 职业接触限值	
NDS (OEL TWA) NDS (OEL TWA)	0.2 mg/m ³ 0.2 mg/m ³
Portugal - Occupational Exposure Limits 葡萄牙 - 职业接触限值	
OEL TWA OEL TWA	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾) 1 mg/m ³ (dust and mist) 1 mg/m ³ (粉尘和雾)
Romania - Occupational Exposure Limits 罗马尼亚 - 职业接触限值	
OEL TWA OEL TWA	0.5 mg/m ³ (dust) 0.5 mg/m ³ (粉尘)
OEL STEL OEL STEL	0.2 mg/m ³ (fume) 0.2 mg/m ³ (雾) 1.5 mg/m ³ (dust) 1.5 mg/m ³ (粉尘)
Slovakia - Occupational Exposure Limits 斯洛伐克 - 职业接触限值	
NPHV (OEL TWA) [1] NPHV (OEL TWA) [1]	1 mg/m ³ (inhalable fraction) 1 mg/m ³ (可吸入分数) 0.2 mg/m ³ (respirable fraction) 0.2 mg/m ³ (可吸入部分)
Spain - Occupational Exposure Limits 西班牙 - 职业接触限值	
VLA-ED (OEL TWA) [1] VLA-ED (OEL TWA) [1]	0.1 mg/m ³ (see UNE EN 481:1995 on workplace atmospheres-respirable fraction) 0.1 mg/m ³ (参见 UNE EN 481:1995 关于工作场所空气-可呼吸部分)

Copper (7440-50-8) 铜 (7440-50-8)	
Sweden - Occupational Exposure Limits 瑞典 - 职业接触限值	
NGV (OEL TWA) NGV (OEL TWA)	0.01 mg/m ³ (respirable fraction) 0.01 mg/m ³ (可吸入部分)
United Kingdom - Occupational Exposure Limits 英国 - 职业接触限值	
WEL TWA (OEL TWA) [1] WEL TWA (OEL TWA) [1]	1 mg/m ³ (dust and mists) 1 mg/m ³ (粉尘和雾) 0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾)
WEL STEL (OEL STEL) WEL STEL (OEL STEL)	0.6 mg/m ³ (calculated-fume) 0.6 mg/m ³ (计算出的-烟雾) 2 mg/m ³ (dust and mist) 2 mg/m ³ (粉尘和雾)
Norway - Occupational Exposure Limits 挪威 - 职业接触限值	
Grenseverdi (OEL TWA) [1] Grenseverdi (OEL TWA) [1]	0.1 mg/m ³ (fume) 0.1 mg/m ³ (烟雾) 1 mg/m ³ (dust) 1 mg/m ³ (粉尘)
Korttidsverdi (OEL STEL) Korttidsverdi (OEL STEL)	3 mg/m ³ (value calculated-dust) 3 mg/m ³ (计算值-粉尘) 0.3 mg/m ³ (value calculated-fume) 0.3 mg/m ³ (计算值-烟雾)
Switzerland - Occupational Exposure Limits 瑞士 - 职业接触限值	
MAK (OEL TWA) [1] MAK (OEL TWA) [1]	0.1 mg/m ³ (inhalable dust) 0.1 mg/m ³ (可吸入性粉尘)
KZGW (OEL STEL) KZGW (OEL STEL)	0.2 mg/m ³ (inhalable dust) 0.2 mg/m ³ (可吸入性粉尘)
USA - ACGIH - Occupational Exposure Limits 美国 - ACGIH - 职业接触限值	
ACGIH OEL TWA ACGIH OEL TWA	0.2 mg/m ³ (fume) 0.2 mg/m ³ (烟雾)
Aluminum (7429-90-5) 铝 (7429-90-5)	
Austria - Occupational Exposure Limits 奥地利 - 职业接触限值	
MAK (OEL TWA) MAK (OEL TWA)	10 mg/m ³ (inhalable fraction) 10 mg/m ³ (可吸入分数)

Aluminum (7429-90-5) 铝 (7429-90-5)	
MAK (OEL STEL) MAK (OEL STEL)	20 mg/m ³ (inhalable fraction) 20 mg/m ³ (可吸入分数)
Belgium - Occupational Exposure Limits 比利时 - 职业接触限值	
OEL TWA OEL TWA	1 mg/m ³ 1 mg/m ³
Bulgaria - Occupational Exposure Limits 保加利亚 - 职业接触限值	
OEL TWA OEL TWA	10 mg/m ³ (inhalable fraction) 10 mg/m ³ (可吸入分数) 1.5 mg/m ³ (respirable fraction) 1.5 mg/m ³ (可吸入部分)
Croatia - Occupational Exposure Limits 克罗地亚 - 职业接触限值	
GVI (OEL TWA) [1] GVI (OEL TWA) [1]	10 mg/m ³ (total dust, inhalable particles) 10 mg/m ³ (总粉尘, 可吸入颗粒) 4 mg/m ³ (respirable dust) 4 mg/m ³ (呼吸性粉尘)
Croatia - Biological limit values 克罗地亚 - 生物限值	
BLV BLV	200 µg/l Parameter: Aluminum - Medium: urine - Sampling time: at the end of the work shift 200 µg/l 参数:铝-介质:尿液-取样时间:在工作结束的时候
Czech Republic - Occupational Exposure Limits 捷克共和国 - 职业接触限值	
PEL (OEL TWA) PEL (OEL TWA)	10 mg/m ³ (dust) 10 mg/m ³ (粉尘)
Denmark - Occupational Exposure Limits 丹麦 - 职业接触限值	
OEL TWA [1] OEL TWA [1]	5 mg/m ³ (dust and powder; total) 5 mg/m ³ (粉尘和粉末;总计) 2 mg/m ³ (dust and powder; respirable) 2 mg/m ³ (粉尘和粉末;可呼吸的)
Estonia - Occupational Exposure Limits 爱沙尼亚 - 职业接触限值	
OEL TWA OEL TWA	10 mg/m ³ (total dust) 10 mg/m ³ (总尘量) 4 mg/m ³ (respirable dust) 4 mg/m ³ (呼吸性粉尘)

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Aluminum (7429-90-5) 铝 (7429-90-5)	
France - Occupational Exposure Limits 法国 - 职业接触限值	
VME (OEL TWA) VME (OEL TWA)	10 mg/m ³ (metal) 10 mg/m ³ (金属) 5 mg/m ³ (dust) 5 mg/m ³ (粉尘)
Germany - Occupational Exposure Limits (TRGS 900) 德国 - 职业接触限值 (TRGS 900)	
AGW (OEL TWA) [1] AGW (OEL TWA) [1]	1.25 mg/m ³ (respirable fraction (dust)) 1.25 mg/m ³ (呼吸组分(粉尘)) 10 mg/m ³ (inhalable fraction (dust)) 10 mg/m ³ (呼吸组分(粉尘))
Germany - Biological limit values (TRGS 903) 德国 - 生物限值 (TRGS 903)	
Biological limit value 生物限值	50 µg/g creatinine Parameter: Aluminum - Medium: urine - Sampling time: for long-term exposures: at the end of the shift after several shifts 50 µg/g 肌酐 参数:铝-介质:尿液-取样时间:长期接触:在几班后的轮班结束时
Greece - Occupational Exposure Limits 希腊 - 职业接触限值	
OEL TWA OEL TWA	10 mg/m ³ (inhalable fraction) 10 mg/m ³ (可吸入分数) 5 mg/m ³ (respirable fraction) 5 mg/m ³ (可吸入部分)
Hungary - Occupational Exposure Limits 匈牙利 - 职业接触限值	
AK (OEL TWA) AK (OEL TWA)	1 mg/m ³ (respirable dust) 1 mg/m ³ (呼吸性粉尘)
Ireland - Occupational Exposure Limits 爱尔兰 - 职业接触限值	
OEL TWA [1] OEL TWA [1]	1 mg/m ³ (respirable fraction) 1 mg/m ³ (可吸入部分)
OEL STEL OEL STEL	3 mg/m ³ (calculated-respirable dust) 3 mg/m ³ (计算出的-呼吸性粉尘)
Latvia - Occupational Exposure Limits 拉脱维亚 - 职业接触限值	
OEL TWA OEL TWA	2 mg/m ³ 2 mg/m ³

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Aluminum (7429-90-5) 铝 (7429-90-5)	
Lithuania - Occupational Exposure Limits 立陶宛 - 职业接触限值	
IPRV (OEL TWA) IPRV (OEL TWA)	5 mg/m ³ (inhalable fraction) 5 mg/m ³ (可吸入分数) 2 mg/m ³ (respirable fraction) 2 mg/m ³ (可吸入部分) 1 mg/m ³ 1 mg/m ³
Poland - Occupational Exposure Limits 波兰 - 职业接触限值	
NDS (OEL TWA) NDS (OEL TWA)	2.5 mg/m ³ (non-stabilized-inhalable fraction) 2.5 mg/m ³ (不稳定的可吸入部分) 1.2 mg/m ³ (non-stabilized-respirable fraction) 1.2 mg/m ³ (不稳定的可吸入部分)
Portugal - Occupational Exposure Limits 葡萄牙 - 职业接触限值	
OEL TWA OEL TWA	10 mg/m ³ (metal dust)
OEL chemical category OEL 化学品分类	A4 - Not Classifiable as a Human Carcinogen A4 - 不能归类为人类致癌物
Romania - Occupational Exposure Limits 罗马尼亚 - 职业接触限值	
OEL TWA OEL TWA	3 mg/m ³ (dust) 3 mg/m ³ (粉尘) 1 mg/m ³ (fume) 1 mg/m ³ (烟雾)
OEL STEL OEL STEL	10 mg/m ³ (dust) 10 mg/m ³ (粉尘) 3 mg/m ³ (fume) 3 mg/m ³ (烟雾)
Romania - Biological limit values 罗马尼亚 - 生物限值	
BLV BLV	200 µg/l Parameter: Aluminum - Medium: urine - Sampling time: end of shift 200 µg/l 参数:铝-介质:尿液-采样时间:换班结束
Slovakia - Occupational Exposure Limits 斯洛伐克 - 职业接触限值	
NPHV (OEL TWA) [1] NPHV (OEL TWA) [1]	4 mg/m ³ (inhalable dust) 4 mg/m ³ (可吸入分数) 1.5 mg/m ³ (respirable dust) 1.5 mg/m ³ (可吸入部分)

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Aluminum (7429-90-5) 铝 (7429-90-5)	
Slovakia - Biological limit values 斯洛伐克 - 生物限值	
BLV BLV	60 µg/g creatinine Parameter: Aluminum - Medium: urine - Sampling time: not critical 60 µg/g 肌酐参数:铝-介质:尿液-取样时间:不关键
Spain - Occupational Exposure Limits 西班牙 - 职业接触限值	
VLA-ED (OEL TWA) [1] VLA-ED (OEL TWA) [1]	1 mg/m ³ (see UNE EN 481:1995 on workplace atmospheres-respirable fraction) 1 mg/m ³ (见 UNE EN 481:1995 关于工作场所空气-可呼吸部分)
Sweden - Occupational Exposure Limits 瑞典 - 职业接触限值	
NGV (OEL TWA) NGV (OEL TWA)	5 mg/m ³ (total dust) 5 mg/m ³ (总尘量) 2 mg/m ³ (respirable fraction) 2 mg/m ³ (可吸入部分)
United Kingdom - Occupational Exposure Limits 英国 - 职业接触限值	
WEL TWA (OEL TWA) [1] WEL TWA (OEL TWA) [1]	10 mg/m ³ (inhalable dust) 10 mg/m ³ (可吸入分数) 4 mg/m ³ (respirable dust) 4 mg/m ³ (可吸入部分)
WEL STEL (OEL STEL) WEL STEL (OEL STEL)	30 mg/m ³ (calculated-inhalable dust) 30 mg/m ³ (计算的-吸入粉尘) 12 mg/m ³ (calculated-respirable dust) 12 mg/m ³ (计算的-可呼吸的粉尘)
Norway - Occupational Exposure Limits 挪威 - 职业接触限值	
Grenseverdi (OEL TWA) [1] Grenseverdi (OEL TWA) [1]	5 mg/m ³ (pyrotechnical-powder) 5 mg/m ³ (烟火的-粉末)
Korttidsverdi (OEL STEL) Korttidsverdi (OEL STEL)	10 mg/m ³ (pyrotechnical-powder) 10 mg/m ³ (烟火的-粉末)
Switzerland - Occupational Exposure Limits 瑞士 - 职业接触限值	
MAK (OEL TWA) [1] MAK (OEL TWA) [1]	3 mg/m ³ (respirable dust) 3 mg/m ³ (呼吸性粉尘)
Switzerland - BAT 瑞士 - BAT	
BAT BAT	50 µg/g creatinine Parameter: Aluminum - Medium: urine - Sampling time: after several shifts (for long-term exposures) (metal) 50 µg/g 肌酐 参数:铝-介质:尿液-采样时间:几次换班后(长期暴露)(金属)



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Aluminum (7429-90-5) 铝 (7429-90-5)	
USA - ACGIH - Occupational Exposure Limits 美国 - ACGIH - 职业接触限值	
ACGIH OEL TWA ACGIH OEL TWA	1 mg/m ³ (respirable particulate matter) 1 mg/m ³ (可吸入颗粒物)
ACGIH chemical category ACGIH 化学品分类	Not Classifiable as a Human Carcinogen 不能归类为人类致癌物
Carbon (7440-44-0) 碳 (7440-44-0)	
Austria - Occupational Exposure Limits 奥地利 - 职业接触限值	
MAK (OEL TWA) MAK (OEL TWA)	5 mg/m ³ (alveolar dust with <1% Quartz, respirable fraction) 5 mg/m ³ (肺泡粉尘含石英<1%, 可呼吸部分)
MAK (OEL STEL) MAK (OEL STEL)	10 mg/m ³ (alveolar dust with <1% Quartz, respirable fraction) 10 mg/m ³ (肺泡粉尘含石英<1%, 可呼吸部分)
Poland - Occupational Exposure Limits 波兰 - 职业接触限值	
NDS (OEL TWA) NDS (OEL TWA)	6 mg/m ³ (synthetic-inhalable fraction) 6 mg/m ³ (合成可吸入部分)

8.1.2. Recommended monitoring procedures

8.1.2. 推荐的监测程序

No additional information available
没有更进一步的信息

8.1.3. Air contaminants formed

8.1.3. 形成的大气污染物

No additional information available
没有更进一步的信息

8.1.4. DNEL and PNEC

8.1.4. DNEL 和 PNEC

No additional information available
没有更进一步的信息

8.1.5. Control banding

8.1.5. 分级管理

No additional information available
没有更进一步的信息

8.2. Exposure controls

8.2. 接触控制

8.2.1. Appropriate engineering controls

8.2.1. 工程控制

Appropriate engineering controls:

工程控制:

Ensure good ventilation of the work station.
确保工作点通风良好。

8.2.2. Personal protection equipment

8.2.2. 个人防护用品

8.2.2.1. Eye and face protection

8.2.2.1. 护眼用品与护面用品

Eye protection:

眼面防护:

Not required
不需要。

8.2.2.2. Skin protection

8.2.2.2. 皮肤防护

Skin and body protection:

皮肤和身体防护:

Wear suitable protective clothing
穿戴适当的防护服

Hand protection:

手防护:

Protective gloves
防护手套

8.2.2.3. Respiratory protection

8.2.2.3. 呼吸系统防护

Respiratory protection:

呼吸系统防护:

Not required
不需要

8.2.2.4. Thermal hazards

8.2.2.4. 热危险源

No additional information available
没有更进一步的信息



8.2.3. Environmental exposure controls

8.2.3. 环境接触控制

Environmental exposure controls:

环境接触控制:

Avoid release to the environment.

避免释放到环境中。

SECTION 9: Physical and chemical properties

第 9 部分: 理化特性

9.1. Information on basic physical and chemical properties

9.1. 基本物理和化学性质信息

Physical state	: Solid
物理状态	固体
Colour	: Not available
颜色	无资料
Appearance	: Solid.
外观	固体
Odour	: Not available
气味	无资料
Odour threshold	: Not available
气味阈值	无资料
Melting point	: Not available
熔点	无资料
Freezing point	: Not available
凝固点	无资料
Boiling point	: Not available
沸点	无资料
Flammability	: Non flammable.
可燃性	不易燃
Explosive limits	: Not available
爆炸极限	无资料
Lower explosion limit	: Not available
爆炸下限	无资料
Upper explosion limit	: Not available
爆炸上限	无资料
Flash point	: Not available
闪点	无资料
Auto-ignition temperature	: Not available
自燃温度	无资料
Decomposition temperature	: Not available
分解温度	无资料
pH	: Not available
pH	无资料
pH solution	: Not available
pH 溶剂	无资料
Viscosity, kinematic	: Not available
运动粘度	无资料
Solubility	: Not available
溶解性	无资料

Partition coefficient n-octanol/water (Log Kow)	: Not available
正辛醇/水分配系数 (Log Kow)	无资料
Vapour pressure	: Not available
蒸气压	无资料
Vapour pressure at 50 °C	: Not available
50°C 时的蒸气压	无资料
Density	: Not available
密度	无资料
Relative density	: Not available
相对密度	无资料
Relative vapour density at 20 °C	: Not available
相对蒸气密度在 20 °C	无资料
Particle size	: Not available
粒度	无资料
Particle size distribution	: Not available
粒度分布	无资料
Particle shape	: Not available
粒形	无资料
Particle aspect ratio	: Not available
颗粒纵横比	无资料
Particle aggregation state	: Not available
粒子聚集状态	无资料
Particle agglomeration state	: Not available
粒子团聚状态	无资料
Particle specific surface area	: Not available
颗粒比表面积	无资料
Particle dustiness	: Not available
粒子含尘度	无资料

9.2. Other information

9.2. 其他信息

9.2.1. Information with regard to physical hazard classes

9.2.1. 涉及物理危险类别的信息

No additional information available
没有更进一步的信息

9.2.2. Other safety characteristics

9.2.2. 其他安全特征

No additional information available
没有更进一步的信息

SECTION 10: Stability and reactivity

第 10 部分: 稳定性和反应性

10.1. Reactivity

10.1. 反应性

The product is non-reactive under normal conditions of use, storage and transport.
本产品在正常使用、储存与运输条件下不具反应性。



10.2. Chemical stability

10.2. 稳定性

Stable under normal conditions.

正常条件下稳定。

10.3. Possibility of hazardous reactions

10.3. 危险反应

No dangerous reactions known under normal conditions of use.

正常使用条件下无已知的危险反应。

10.4. Conditions to avoid

10.4. 应避免的条件

None under recommended storage and handling conditions (see section 7).

依据建议的储存与操作（见第7部分）。

10.5. Incompatible materials

10.5. 禁配物

No additional information available

没有更进一步的信息

10.6. Hazardous decomposition products

10.6. 危险的分解产物

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

在正常储存与使用条件下，不会产生危害分解物。

SECTION 11: Toxicological information

第 11 部分: 毒理学信息

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1. 法规 (EC) 第 1272/2008 号中所规定危害类别的信息

Acute toxicity (oral)	: Not classified
急性毒性（经口）	非此类
Acute toxicity (dermal)	: Not classified
急性毒性（经皮）	非此类
Acute toxicity (inhalation)	: Not classified
急性毒性（吸入）	非此类

Copper (7440-50-8) 铜 (7440-50-8)	
LC50 Inhalation - Rat LC50 吸入 - 大鼠	> 5.11 mg/l/4h > 5.11 mg/l/4 小时
Carbon (7440-44-0) 碳 (7440-44-0)	
LD50 oral rat LD50 经口 大鼠	> 10000 mg/kg > 10000 mg/kg



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Phosphate(1-), hexafluoro-, lithium (21324-40-3)
六氟磷酸锂 (21324-40-3)

LD50 oral rat LD50 经口 大鼠	50 – 300 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity) 50 – 300 mg/kg bodyweight 动物:大鼠, 动物性别:雌性, 指南:OECD 指南 423(急性口服毒性-急性毒性分类方法), 指南:EU 方法 B.1 tris(急性口服毒性-急性毒性分类方法), 指南:EPA OPPTS 870.1100(急性口服毒性)
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Skin corrosion/irritation 皮肤腐蚀/刺激	: Not classified 非此类
Serious eye damage/irritation 严重眼损伤/眼刺激	: Not classified 非此类
Respiratory or skin sensitisation 呼吸道或皮肤致敏	: Not classified 非此类
Germ cell mutagenicity 生殖细胞致突变性	: Not classified 非此类
Carcinogenicity 致癌性	: Not classified 非此类
Reproductive toxicity 生殖毒性	: Not classified 非此类

Phosphate(1-), hexafluoro-, lithium (21324-40-3)
六氟磷酸锂 (21324-40-3)

NOAEL (animal/male, F0/P) NOAEL (动物/雄性, F0/P)	500 mg/kg bodyweight Animal: rat, Animal sex: male 500 mg/kg 体重 动物:鼠, 动物性别:雄性
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STOT-single exposure 特异性靶器官系统毒性 一次接触	: Not classified 非此类
STOT-repeated exposure 特异性靶器官系统毒性 反复接触	: Not classified 非此类

Phosphate(1-), hexafluoro-, lithium (21324-40-3)
六氟磷酸锂 (21324-40-3)

STOT-repeated exposure 特异性靶器官系统毒性 反复接触	Causes damage to organs through prolonged or repeated exposure. 长期或重复接触会对器官造成损害。
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Aspiration hazard 吸入危害	: Not classified 非此类
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11.2. Information on other hazards

11.2. 其他危险源信息

11.2.1. Endocrine disrupting properties

11.2.1. 内分泌干扰特性

Adverse health effects caused by endocrine disrupting properties : The mixture is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
 由内分泌干扰特性引起的不良健康影响 : 该产品因不具有内分泌干扰特性所以未纳入根据 REACH 第 59(1) 条所建立的清单, 或根据欧委会授权条例 (EU) 2017/2100 或欧委会条例 (EU) 2018/605 中所述的标准, 被鉴定为不具有内分泌干扰特性

11.2.2. Other information

11.2.2. 其他信息

Other information : No information available
 其他信息 : 无相关信息

SECTION 12: Ecological information

第 12 部分: 生态学信息

12.1. Toxicity

12.1. 毒性

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
 生态学 - 一般 : 本产品不被认为对水生生物有害, 长期来说亦不对环境有害。
 Hazardous to the aquatic environment, short-term (acute) : Not classified
 水生环境危险, 短期 (急性) : 非此类
 Hazardous to the aquatic environment, long-term (chronic) : Not classified
 水生环境危险, 长期 (慢性) : 非此类

Copper (7440-50-8) 铜 (7440-50-8)	
LC50 - Fish [1] LC50 - 鱼类 [1]	0.0068 – 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas) 0.0068 – 0.0156 mg/l (暴露时间:96h-种类: 黑头软口鲮鱼)
LC50 - Fish [2] LC50 - 鱼类 [2]	< 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static]) < 0.3 mg/l (暴露时间: 96 h - 种类: 黑头软口鲮鱼 [静态的])
EC50 - Crustacea [1] EC50 - 甲壳纲动物 [1]	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static]) 0.03 mg/l (暴露时间: 48 h - 种类: 大型蚤 [静态的])
EC50 72h - Algae [1] EC50 72 小时 - 藻类 [1]	0.0426 – 0.0535 mg/l (Species: Pseudokirchneriella subcapitata [static]) 0.0426 – 0.0535 mg/l (种类: 月芽藻 [静态的])
Phosphate(1-), hexafluoro-, lithium (21324-40-3) 六氟磷酸锂 (21324-40-3)	
EC50 96h - Algae [1] EC50 96 小时 - 藻类 [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata > 100 mg/l 测试生物(种): 月芽藻



Phosphate(1-), hexafluoro-, lithium (21324-40-3)
六氟磷酸锂 (21324-40-3)

NOEC chronic fish NOEC 慢性, 鱼类	4 mg/l Test organisms (species): Duration: '21 d' 4 mg/l 测试生物(种): 持续时间: '21 d'
----------------------------------	---

12.2. Persistence and degradability

12.2. 持久性和降解性

No additional information available
没有更进一步的信息

12.3. Bioaccumulative potential

12.3. 潜在的生物累积性

No additional information available
没有更进一步的信息

12.4. Mobility in soil

12.4. 土壤中的迁移性

No additional information available
没有更进一步的信息

12.5. Results of PBT and vPvB assessment

12.5. PBT 和 vPvB 评价结果

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
本物质/混合物不符合 REACH 法规附件 XIII PBT 标准

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
本物质/混合物不符合 REACH 法规附件 XIII vPvB 标准

12.6. Endocrine disrupting properties

12.6. 内分泌干扰特性

Adverse effects on the environment caused by endocrine disrupting properties : The mixture is not included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605
由内分泌干扰特性引起的对环境的不良影响 : 该产品未包含在根据 REACH 第 59(1) 条建立的具有内分泌干扰特性的清单中, 或根据委员会授权法规 (EU) 2017/ 2100 或委员会条例 (EU) 2018/605 中规定的标准未被确定为具有内分泌干扰特性。

12.7. Other adverse effects

12.7. 其他环境有害作用

No additional information available
没有更进一步的信息



SECTION 13: Disposal considerations

第 13 部分: 废弃处置

13.1. Waste treatment methods

13.1. 废弃化学品

Waste treatment methods 废弃化学品	: Dispose of contents/container in accordance with licensed collector's sorting instructions. Destroy the product by incineration (in accordance with local and national regulations). 依据合格的处理厂的分说明处置内容物及容器。通过焚烧销毁产品（根据当地和国家法规）。
Contaminated packaging 污染包装物	: Dispose of contents/container in accordance with licensed collector's sorting instructions. Destroy packaging by incineration at an approved waste disposal site. In accordance with local and national regulations. 依据合格的处理厂的分说明处置内容物及容器。按照当地和国家的规定，在经批准的废物处置地点焚毁包装。

SECTION 14: Transport information

第 14 部分: 运输信息






The product can be shipped in three ways. When it is shipped alone, the UN number is 3480. When it is shipped in equipment, the UN number is 3481. When it is battery-powered vehicle / battery-powered equipment, the UN number is 3171. 该产品可以通过三种方式运输。单独发货时，UN 编号是 3480。当它在设备中运输时，UN 编号是 3481。当它是电池驱动的车辆/电池驱动的设备时，UN 编号是 3171。

PART I (shipped alone)

PART I (单独运输)

In accordance with ADR / IMDG(IMDG CODE 40-20) / IATA (DGR 64th) / ADN / RID
根据 ADR / IMDG(IMDG CODE 40-20) / IATA (DGR 64th) / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number 14.1. UN 编号或识别号				
UN 3480	UN 3480	UN 3480	UN 3480	UN 3480
14.2. UN proper shipping name 14.2. 联合国正式运输名称				
LITHIUM ION BATTERIES 锂离子电池	LITHIUM ION BATTERIES 锂离子电池	LITHIUM ION BATTERIES 锂离子电池	LITHIUM ION BATTERIES 锂离子电池	LITHIUM ION BATTERIES 锂离子电池
Transport document description 运输单据说明				
UN 3480 LITHIUM ION BATTERIES, 9A, (E) UN 3480 锂离子电池, 9A, (E)	UN 3480 LITHIUM ION BATTERIES, 9 UN 3480 锂离子电池, 9	UN 3480 Lithium ion batteries, 9A UN 3480 锂离子电池, 9A	UN 3480 LITHIUM ION BATTERIES, 9A UN 3480 锂离子电池, 9A	UN 3480 LITHIUM ION BATTERIES, 9A UN 3480 锂离子电池, 9A
14.3. Transport hazard class(es) 14.3. 运输危险分类				
9	9	9	9	9

ADR	IMDG	IATA	ADN	RID
				
14.4. Packing group 14.4. 包装类别				
Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用
14.5. Environmental hazards 14.5. 环境危害				
Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否 Marine pollutant: No 海洋污染物: 否	Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否
No supplementary information available 无补充信息				

14.6. Special precautions for user

14.6. 用户的特别防护措施

Overland transport

道路运输

Classification code (ADR) 分类代码 (ADR)	: M4
Special provisions (ADR) 特殊条款 (ADR)	: 188, 230, 310, 348, 376, 377, 387, 636
Limited quantities (ADR) 数量限制(ADR)	: 0
Excepted quantities (ADR) 除外量 (ADR)	: E0
Packing instructions (ADR) 包装导则(ADR)	: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
Transport category (ADR) 运输类别(ADR)	: 2
Tunnel restriction code (ADR) 隧道限制编号(ADR)	: E
EAC code EAC 代码	: 2Y

Transport by sea (IMDG)

海运 (IMDG)

Special provisions (IMDG) 特殊规定(IMDG)	: 188, 230, 310, 348, 376, 377, 384, 387
Limited quantities (IMDG) 限制数量 (国际海运危险货物规则 (IMDG))	: 0

Excepted quantities (IMDG)	: E0
除外量 (IMDG)	
Packing instructions (IMDG)	: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906
包装指示 (IMDG)	
EmS-No. (Fire)	: F-A
应急措施表(失火)	
EmS-No. (Spillage)	: S-I
应急措施表(泄漏)	
Stowage category (IMDG)	: A
积载类别(IMDG)	
Stowage and handling (IMDG)	: SW19
装载和处置 (IMDG)	
Properties and observations (IMDG)	: Electrical batteries containing lithium ion encased in a rigid metallic body. Lithium ion batteries may also be shipped in, or packed with, equipment. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants.
特性与注意事项 (IMDG)	装在硬金属体内的含有锂或锂合金的带电的蓄电池。锂离子电池也可能装在设备中或设备中含有锂离子电池。锂离子电池可能由于不合适的结构或与污染物反应造成电池爆裂而起火。

Air transport (IATA)**航空运输 (IATA)**

PCA Excepted quantities (IATA)	: E0
PCA (客运和货运) 例外数量 (IATA)	
PCA Limited quantities (IATA)	: Forbidden
PCA (客运和货运) 限制数量 (IATA)	禁止
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA (客运和货运) 限制数量最大净数量 (IATA)	禁止
PCA packing instructions (IATA)	: Forbidden
PCA (客运和货运) 包装指示 (IATA)	禁止
PCA max net quantity (IATA)	: Forbidden
PCA (客运和货运) 最大净数量 (IATA)	禁止
CAO packing instructions (IATA)	: See 965
CAO (仅限货机) 包装指示 (IATA)	
CAO max net quantity (IATA)	: See 965
CAO (仅限货机) 最大净数量 (IATA)	
Special provisions (IATA)	: A88, A99, A154, A164, A183, A201, A206, A213, A331, A334, A802
特殊条款 (IATA)	
ERG code (IATA)	: 12FZ
ERG 代码 (IATA)	

Inland waterway transport (ADN)**内陆水路运输 (ADN)**

Classification code (ADN)	: M4
分级代码 (ADN)	
Special provisions (ADN)	: 188, 230, 310, 348, 376, 377, 387, 636
特殊条款 (ADN)	
Limited quantities (ADN)	: 0
数量限制(ADN)	
Excepted quantities (ADN)	: E0
除外量 (ADN)	



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Equipment required (ADN) : PP
 要求的装置 (ADN)
 Number of blue cones/lights (ADN) : 0
 蓝色锥形/高亮数目 (ADN)

Rail transport (RID)

铁路运输 (RID)

Classification code (RID) : M4
 分类代码 (RID)
 Special provisions (RID) : 188, 230, 310, 348, _376, 377, 387, 636
 特殊条款 (RID)
 Limited quantities (RID) : 0
 限制数量 (RID)
 Excepted quantities (RID) : E0
 除外量 (RID)
 Packing instructions (RID) : P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906
 包装导则(RID)
 Transport category (RID) : 2
 运输类别 (RID)
 Colis express (express parcels) (RID) : CE2
 快递包裹(RID)
 Hazard identification number (RID) : 90
 危险性分类编号(RID)

14.7. Maritime transport in bulk according to IMO instruments

14.7. 根据国际海事组织的文书散装运输






Not applicable.
 不适用。

PART 2(shipped in equipment)

PART 2(在设备中运输)

In accordance with ADR / IMDG(IMDG CODE 40-20) / IATA (DGR 64th) / ADN / RID
 根据 ADR / IMDG(IMDG CODE 40-20) / IATA (DGR 64th) / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number 14.1. UN 编号或识别号				
UN 3481	UN 3481	UN 3481	UN 3481	UN 3481
14.2. UN proper shipping name 14.2. 联合国正式运输名称				
LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT 设备中含有锂离子电池	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT 设备中含有锂离子电池	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT 设备中含有锂离子电池	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT 设备中含有锂离子电池	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT 设备中含有锂离子电池

ADR	IMDG	IATA	ADN	RID
Transport document description 运输单据说明				
UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A, (E) UN 3481 设备中含有锂离子电池, 9A, (E)	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9 UN 3481 设备中含有锂离子电池, 9	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A UN 3481 设备中含有锂离子电池, 9A	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A UN 3481 设备中含有锂离子电池, 9A	UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A UN 3481 设备中含有锂离子电池, 9A
14.3. Transport hazard class(es) 14.3. 运输危险分类				
9	9	9	9	9
				
14.4. Packing group 14.4. 包装类别				
Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用
14.5. Environmental hazards 14.5. 环境危害				
Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否 Marine pollutant: No 海洋污染物: 否	Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否
No supplementary information available 无补充信息				

14.6. Special precautions for user

14.6. 用户的特别防护措施

Overland transport

道路运输

Classification code (ADR) 分类代码 (ADR)	: M4
Special provisions (ADR) 特殊条款 (ADR)	: 188, 230, 310, 348, 360, 376, 377, 387, 390, 670
Limited quantities (ADR) 数量限制(ADR)	: 0
Excepted quantities (ADR) 除外量 (ADR)	: E0
Packing instructions (ADR) 包装导则(ADR)	: P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906



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Transport category (ADR) : 2
运输类别(ADR)
Tunnel restriction code (ADR) : E
隧道限制编号(ADR)
EAC code : 2Y
EAC 代码

Transport by sea (IMDG)

海运 (IMDG)

Special provisions (IMDG) : 188, 230, 310, 348, 360, 376, 377, 384, 387
特殊规定(IMDG)
Limited quantities (IMDG) : 0
限制数量 (国际海运危险货物规则 (IMDG))
Excepted quantities (IMDG) : E0
除外量 (IMDG)
Packing instructions (IMDG) : P903, P908, P909 , P910, P911, LP903, LP904, LP905, LP906
包装指示 (IMDG)
EmS-No. (Fire) : F-A
应急措施表(失火)
EmS-No. (Spillage) : S-I
应急措施表(泄漏)
Stowage category (IMDG) : A
积载类别(IMDG)
Stowage and handling (IMDG) : SW19
装载和处置 (IMDG)
Properties and observations (IMDG) : Electrical batteries containing lithium ion encased in a rigid metallic body. Lithium ion batteries may also be shipped in, or packed with, equipment. Electrical lithium batteries may cause fire due to an explosive rupture of the body caused by improper construction or reaction with contaminants.
特性与注意事项 (IMDG) : 锂离子电池:装在坚硬金属体中的锂离子电池锂离子电池也可以运输到设备中, 或与设备一起包装。电动锂电池因结构不当或与污染物发生反应而导致本体爆炸破裂, 可能引起火灾。

Air transport (IATA)

航空运输 (IATA)

PCA Excepted quantities (IATA) : E0
PCA (客运和货运) 例外数量 (IATA)
PCA Limited quantities (IATA) : Forbidden
PCA (客运和货运) 限制数量 (IATA) 禁止
PCA limited quantity max net quantity (IATA) : Forbidden
PCA (客运和货运) 限制数量最大净数量 (IATA) 禁止
PCA packing instructions (IATA) : 966
PCA (客运和货运) 包装指示 (IATA)
PCA max net quantity (IATA) : 5kg
PCA (客运和货运) 最大净数量 (IATA)
CAO packing instructions (IATA) : 966
CAO (仅限货机) 包装指示 (IATA)
CAO max net quantity (IATA) : 35kg
CAO (仅限货机) 最大净数量 (IATA)
Special provisions (IATA) : A88, A99, A154, A164, A181, A185, A206, A213, A802
特殊条款 (IATA)

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group
Building 12 & 13, Zhiheng Wisdomland Business Park,
Guankou Erlu, Nantou, Nanshan District,
Shenzhen, Guangdong 518052 China

Tel.: (86) 755 88286998
Fax: (86) 755 88285299



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ERG code (IATA) : 12FZ
ERG 代码 (IATA)

Inland waterway transport (ADN)

内陆水路运输 (ADN)

Classification code (ADN) : M4
分级代码 (ADN)
Special provisions (ADN) : 188, 230, 310, 348, 360, 376, 377, 387, 390, 670
特殊条款 (ADN)
Limited quantities (ADN) : 0
数量限制(ADN)
Excepted quantities (ADN) : E0
除外量 (ADN)
Equipment required (ADN) : PP
要求的装置 (ADN)
Number of blue cones/lights (ADN) : 0
蓝色锥形/高亮数目 (ADN)

Rail transport (RID)

铁路运输 (RID)

Classification code (RID) : M4
分类代码 (RID)
Special provisions (RID) : 188, 230, 310, 348, 360, _376, 377, 387, 390, 670
特殊条款 (RID)
Limited quantities (RID) : 0
限制数量 (RID)
Excepted quantities (RID) : E0
除外量 (RID)
Packing instructions (RID) : P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906
包装导则(RID)
Transport category (RID) : 2
运输类别 (RID)
Colis express (express parcels) (RID) : CE2
快递包裹(RID)
Hazard identification number (RID) : 90
危险性分类编号(RID)

14.7. Maritime transport in bulk according to IMO instruments

14.7. 根据国际海事组织的文书散装运输

Not applicable.
不适用


PART 3(battery-powered vehicle / battery-powered equipment)

PART 3(电池驱动的车辆或电池驱动的设备)

In accordance with ADR / IMDG(IMDG CODE 40-20) / IATA (DGR 64th) / ADN / RID
根据 ADR / IMDG(IMDG CODE 40-20) / IATA (DGR 64th) / ADN / RID



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ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number 14.1. UN 编号或识别号				
UN 3171	UN 3171	UN 3171	UN 3171	UN 3171
14.2. UN proper shipping name 14.2. 联合国正式运输名称				
BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT 电池驱动的车辆或电池驱动的设备	BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT 电池驱动的车辆或电池驱动的设备	BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT 电池驱动的车辆或电池驱动的设备	BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT 电池驱动的车辆或电池驱动的设备	BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT 电池驱动的车辆或电池驱动的设备
Transport document description 运输单据说明				
UN 3171 BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT, 9, (-) UN 3171 电池驱动的车辆或电池驱动的设备, 9, (-)	UN 3171 BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT, 9 UN 3171 电池驱动的车辆或电池驱动的设备, 9	UN 3171 BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT, 9 UN 3171 电池驱动的车辆或电池驱动的设备, 9	UN 3171 BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT, 9 UN 3171 电池驱动的车辆或电池驱动的设备, 9	UN 3171 BATTERY POWERED VEHICLE / BATTERY POWERED EQUIPMENT, 9 UN 3171 电池驱动的车辆或电池驱动的设备, 9
14.3. Transport hazard class(es) 14.3. 运输危险分类				
9	9	9	9	9
Not applicable. 不适用	Not applicable. 不适用		Not applicable. 不适用	Not applicable. 不适用
14.4. Packing group 14.4. 包装类别				
Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用	Not applicable. 不适用
14.5. Environmental hazards 14.5. 环境危害				
Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否 Marine pollutant: No 海洋污染物: 否	Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否	Dangerous for the environment: No 对环境有危险性: 否
No supplementary information available 无补充信息				

14.6. Special precautions for user**14.6. 用户的特别防护措施****Overland transport****道路运输**

Classification code (ADR)	: M11
分类代码 (ADR)	
Special provisions (ADR)	: 388, 666, 667, 669
分类代码 (ADR)	
Tunnel restriction code (ADR)	: -
隧道限制编号(ADR)	
EAC code	: 4W
EAC 代码	

Transport by sea (IMDG)**海运 (IMDG)**

Special provisions (IMDG)	: 388, 961, 962, 971
特殊规定(IMDG)	
EmS-No. (Fire)	: F-A
应急措施表(失火)	
EmS-No. (Spillage)	: S-I
应急措施表(泄漏)	
Stowage category (IMDG)	: A
积载类别(IMDG)	
Properties and observations (IMDG)	: Type of articles transported under this entry include vehicles or equipment powered by wet batteries, sodium batteries or lithium batteries with the batteries installed, such as electrically-powered cars, lawnmowers, wheelchairs and other mobility aids.
特性与注意事项 (IMDG)	: 在此条目下运输的物品类型包括装有并以湿电池、钠电池或锂电池为动力的车辆或设备，例如电动汽车、剪草机、轮椅或其他助力装置。

Air transport (IATA)**航空运输 (IATA)**

PCA Excepted quantities (IATA)	: E0
PCA (客运和货运) 例外数量 (IATA)	
PCA Limited quantities (IATA)	: Forbidden
PCA (客运和货运) 限制数量 (IATA)	: 禁止
PCA limited quantity max net quantity (IATA)	: Forbidden
PCA (客运和货运) 限制数量最大净数量 (IATA)	: 禁止
PCA packing instructions (IATA)	: 952
PCA (客运和货运) 包装指示 (IATA)	
PCA max net quantity (IATA)	: No limit
PCA (客运和货运) 最大净数量 (IATA)	: 没有限制
CAO packing instructions (IATA)	: 952
CAO (仅限货机) 包装指示 (IATA)	
CAO max net quantity (IATA)	: No limit
CAO (仅限货机) 最大净数量 (IATA)	: 没有限制
Special provisions (IATA)	: A67, A87, A94, A164, A182, A214
特殊条款 (IATA)	



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ERG code (IATA) : 9L
ERG 代码 (IATA)

Inland waterway transport (ADN)

内陆水路运输 (ADN)

Classification code (ADN) : M11
分级代码 (ADN)
Special provisions (ADN) : 388, 666, 667, 669
特殊条款 (ADN)
Equipment required (ADN) : PP
要求的装置 (ADN)
Number of blue cones/lights (ADN) : 0
蓝色锥形/高亮数目 (ADN)

Rail transport (RID)

铁路运输 (RID)

Classification code (RID) : M11
分类代码 (RID)
Special provisions (RID) : 388, 666, 667, 669
特殊条款 (RID)

14.7. Maritime transport in bulk according to IMO instruments

14.7. 根据国际海事组织的文书散装运输

Not applicable.
不适用。

SECTION 15: Regulatory information

第 15 部分: 法规信息

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1. 物质或混合物的安全、健康和环境保护规定/特殊法规

15.1.1. EU-Regulations

15.1.1. 欧盟规定

REACH Annex XVII (Restriction List)

REACH 附录 XVII (限制物质清单)

Not applicable.
不适用。

REACH Annex XIV (Authorisation List)

REACH 附录 XIV (授权物质清单)

Not applicable.
不适用。

REACH Candidate List (SVHC)

REACH 候选物清单 (SVHC)

Contains no substance on the REACH candidate list
未含任何 REACH 候选清单物质



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PIC Regulation (Prior Informed Consent)

PIC 条例（事先知情同意条例）

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

不含有属于欧洲议会和理事会法规（EU）649/2012（2012年7月4日）《危险化学品进出口》管控范围的物质。

POP Regulation (Persistent Organic Pollutants)

POP 条例（持久性有机污染物）

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants.

不含有属于欧洲议会和欧盟理事会法规(EU)No 2019/1021(2019年6月20日)关于持久性有机污染物的管控范围的物质。

Ozone Regulation (1005/2009)

臭氧条例（1005/2009）

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

不含 2009 年 9 月 16 日欧洲议会和欧盟理事会 (EU) 1005/2009 关于消耗臭氧层物质法规管辖的物质。

Explosives Precursors Regulation (2019/1148)

爆炸物前体条例（2019/1148）

Contains substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors.

含受 2019 年 6 月 20 日法规 (EU) 2019/1148 欧洲议会和欧盟理事会关于爆炸物前体销售和使用监管的物质。

ANNEX II REPORTABLE EXPLOSIVES PRECURSORS

附件 II 可报告的爆炸物前体

List of substances on their own or in mixtures or in substances for which suspicious transactions and significant disappearances and thefts are to be reported to the relevant national contact point within 24 hours.

对此清单物质无论是其本身还是包含这些物质的混合物或物质，应在 24 小时内向有关国家联络点报告可疑交易以及重大失踪和盗窃事件。

Name 名称	CAS-No. CAS 编号	Combined Nomenclature code (CN) 综合税则目录代码 (CN)	Combined Nomenclature code for mixture without constituents which would determine classification under another CN code 混合物的综合税则目录代码，该混合物不含可决定另一 CN 代码分类的组成
Aluminium, powders	7429-90-5	7603 10 00; ex 7603 20 00	

Please see https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf.
 请参见 https://ec.europa.eu/home-affairs/system/files/2021-11/list_of_competent_authorities_and_national_contact_points_en.pdf

Drug Precursors Regulation (273/2004)

药物前体条例（273/2004）

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on drug precursors)

不含列入药物前体清单的物质（药物前体条例 (EC) 273/2004）

15.2. Chemical safety assessment

15.2. 化学品安全评估

No chemical safety assessment has been carried out.

未进行化学安全性评估。

SECTION 16: Other information

第 16 部分: 其他信息

Indication of changes:

显示变更:

Not applicable.

不适用。

Abbreviations and acronyms:

缩略语和首字母缩写:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways 欧盟有关国际危险货物内陆水道运输的协议
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road 有关国际危险货物公路运输的协议
ATE	Acute Toxicity Estimate 急性毒性估计值
BCF	Bioconcentration factor 生物富集因子
BLV	Biological limit value 生物限值
BOD	Biochemical oxygen demand (BOD) 生化需氧量(BOD)
COD	Chemical oxygen demand (COD) 化学需氧量 (COD)
DMEL	Derived Minimal Effect level 推导最小影响水平剂量
DNEL	Derived-No Effect Level 推导的无影响水平剂量
EC-No.	European Community number 欧洲共同体编号
EC50	Median effective concentration 半数效应浓度
EN	European Standard 欧洲标准
IARC	International Agency for Research on Cancer 国际癌症研究机构
IATA	International Air Transport Association 国际航空运输协会
IMDG	International Maritime Dangerous Goods 国际海运危险品法规
LC50	Median lethal concentration 半数致死浓度

Abbreviations and acronyms: 缩略语和首字母缩写:	
LD50	Median lethal dose 半数致死剂量
LOAEL	Lowest Observed Adverse Effect Level 最低可观察有害效应水平
NOAEC	No-Observed Adverse Effect Concentration 无可见不良效应浓度
NOAEL	No-Observed Adverse Effect Level 无可见不良效应剂量水平
NOEC	No-Observed Effect Concentration 无可观察效应浓度
OECD	Organisation for Economic Co-operation and Development 经济合作与发展组织
OEL	Occupational Exposure Limit 职业暴露限值
PBT	Persistent Bioaccumulative Toxic 持久的、生物蓄积的、有毒的
PNEC	Predicted No-Effect Concentration 预测无效应浓度
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail 国际危险货物铁路运输欧洲协定
SDS	Safety Data Sheet 化学品安全技术说明书
STP	Sewage treatment plant 污水处理站
ThOD	Theoretical oxygen demand (ThOD) 理论需氧量 (ThOD)
TLM	Median Tolerance Limit 中位容许限量
VOC	Volatile Organic Compounds 挥发性有机化合物
CAS-No.	Chemical Abstract Service number 化学文摘社编号
N.O.S.	Not Otherwise Specified 未另行规定
vPvB	Very Persistent and Very Bioaccumulative 强持久性、高生物蓄积性
ED	Endocrine disrupting properties 内分泌干扰特性



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Data sources : Loli. ECHA reference.
 参考文献 Loli. ECHA 相关。
 Training advice : Normal use of this product shall imply use in accordance with the instructions on
 培训意见 the packaging.
 本产品的正常使用应当提示根据包装上的说明使用。

Full text of H- and EUH-statements:	
H 与 EUH 词组完整内容:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3 急性毒性 (口服) 3 类
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2 危害水生环境-长期危险 2 类
Eye Dam. 1	Serious eye damage/eye irritation, Category 1 严重眼损伤/眼刺激 1 类
Flam. Sol. 1	Flammable solids, Category 1 易燃固体 1 类
H228	Flammable solid. 易燃固体。
H261	In contact with water releases flammable gases. 遇水放出易燃气体。
H301	Toxic if swallowed. 吞咽会中毒。
H314	Causes severe skin burns and eye damage. 造成严重皮肤灼伤和眼损伤。
H318	Causes serious eye damage. 造成严重眼损伤。
H372	Causes damage to organs through prolonged or repeated exposure. 长期或重复接触会对器官造成损害。
H411	Toxic to aquatic life with long lasting effects. 对水生生物有毒并具有长期持续影响。
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A 皮肤腐蚀/刺激 1A 类
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1 特定目标器官毒性-多次接触 1 类
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2 遇水放出易燃气体的物质和混合物 2 类

Safety Data Sheet (SDS), EU

化学品安全说明书 (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

这些信息是基于我们现有的知识，目的只在于描述产品的健康，安全和环保要求。因此，它不应该被理解为保证产品的任何特定性质。

-----End of Report 报告结束-----

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