

Safety Data Sheet

(According to Regulation (EC) No. 1907/2006 (REACH) and its amendment Regulation (EU) 2020/878)

Applicant: Rifen International Ltd

Unit 601, 6/F, Apec Plaza, 49 Hoi Yuen Road, Kwun Tong, Address:

Kowloon, HONG KONG

Attn.: Mr. Richard Felen

Sample Rechargeable Li-ion Battery **Description:**

Model No.: 401119-50mAh

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

Prepared by: Reviewed by:

Elsa Deng

Elsa Deng

Scarlett Liang **Project Handler Designated Reviewer**

Any use for advertising purposes must be granted in writing. This technical report may only be quoted in full. This report is the result of a single examination of the object in question and is not generally applicable evaluation of the quality of other products in regular production. For further details,

please see testing and certification regulation, chapter A-3.4.

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.

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

Page: 1 of 15

Tel.: (86) 755 88286998

Fax: (86) 755 88285299

yorlest

Technical Report No. 68.413.24.0007.01 **Rev. 01**



Dated 2024-01-26

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

1.1. Product identifier

Product form : Article

Trade name : Rechargeable Li-ion Battery

401119-50mAh Model No

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Power supply

1.2.2. Uses advised against

: No information available Restrictions on use

1.3. Details of the supplier of the safety data sheet

Supplier

RIFEN INTERNATIONAL LIMITED UNIT 601, 6/F APEC PLAZA,49 HOI YUEN ROAD,KWUN TONG, KOWLOON, HONG KONG 518101

T 852+23256228

1.4. Emergency telephone number

Emergency number 852+23256228

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Not classified

Adverse physicochemical, human health and environmental effects

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

2.2. Label elements

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

Hazard pictograms (CLP) None Signal word (CLP) None

Hazard statements (CLP) : Not applicable Precautionary statements (CLP) Not applicable

EUH-statements : None.

2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

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

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



SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lithium Hexafluoro phosphate	(CAS-No.) 21324-40-3 (EC-No.) 244-334-7	22.7	Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT RE 1, H372
Cobalt lithium dioxide	(CAS-No.) 12190-79-3 (EC-No.) 235-362-0	16.7	Not classified
Lithium manganese oxide	(CAS-No.) 12057-17-9 (EC-No.) 426-770-1;601-724-5	16.7	Not classified
Graphite	(CAS-No.) 7782-42-5 (EC-No.) 231-955-3	15.4	Not classified
1,1-Difluoroethylene polymer	(CAS-No.) 24937-79-9 (EC-No.) 607-458-6	0.5	Not classified
S-P		0.3	Not classified
Carboxymethyl cellulose	(CAS-No.) 9000-11-7 (EC-No.) 618-326-2	0.2	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : If irritation persists, consult a doctor.
First-aid measures after inhalation : Not an expected route of exposure.

First-aid measures after skin contact : Not expected to present a significant skin hazard under anticipated conditions of

normal use. No special technical protective measures required.

First-aid measures after eye contact : Not an expected route of exposure. First-aid measures after ingestion : Not an expected route of exposure.

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

Symptoms/effects : No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Use extinguishing measures that are appropriate

to local circumstances and the surrounding environment.

Unsuitable extinguishing media : No information available.

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

Page: 3 of 15

Tel.: (86) 755 88286998

Technical Report No. 68.413.24.0007.01 **Rev. 01**

Dated 2024-01-26



5.2. Special hazards arising from the substance or mixture

: The product is not flammable. Hazardous decomposition products in case of : Toxic fumes may be released.

5.3. Advice for firefighters

Firefighting instructions : 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. Ensure adequate ventilation, especially in confined areas. Evacuate personnel to a safe area. Avoid contact with skin, eyes and clothing. Move containers away from the fire area if this can be done without risk. Stay upwind.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained

breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures Ventilate spillage area. Evacuate personnel to a safe area. Remove ignition

sources. Avoid contact with skin and eyes.

6.1.2. For emergency responders

: Do not attempt to take action without suitable protective equipment. For further Protective equipment

information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Use a clean shovel to collect it in a properly

sealed waste container with a label and completely sealed. Such containers shall be stored in suitable locations for the purpose of handling or disposing in

accordance with national law.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : 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

: Do not eat, drink or smoke when using this product. Always wash hands after Hygiene measures

handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Keep away from open flames, hot surfaces and sources of ignition.

Storage conditions : Avoid high temperatures. Store in a dry place. Keep container tightly closed. Store

in a well-ventilated place. Keep cool.

Incompatible materials : Strong acids. Strong bases. Strong oxidizing agents.

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

Page: 4 of 15

Tel.: (86) 755 88286998



7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1.1 National occupational exposure and biological limit values

Graphite (7782-42-5)				
Austria - Occupational Exposure Limits				
MAK (OEL TWA)	5 mg/m³ (alveolar dust with <1% Quartz, respirable fraction)			
MAK (OEL STEL)	10 mg/m³ (alveolar dust with <1% Quartz, respirable fraction)			
Belgium - Occupational Exposure Limits				
OEL TWA	2 mg/m³ (except fibers-alveolar fraction)			
Bulgaria - Occupational Exposure Limits				
OEL TWA	5 mg/m³ (inhalable fraction)			
Croatia - Occupational Exposure Limits				
GVI (OEL TWA) [1]	4 mg/m³ (respirable dust) 10 mg/m³ (total dust, inhalable particles)			
Czech Republic - Occupational Exposure Limi	ts			
PEL (OEL TWA)	2 mg/m³ (dust)			
Denmark - Occupational Exposure Limits				
OEL TWA [1]	2.5 mg/m³ (natural-respirable)			
OEL STEL	5 mg/m³ (natural-respirable)			
Estonia - Occupational Exposure Limits	SUD			
OEL TWA	5 mg/m³ (total dust (Dusts)			
Finland - Occupational Exposure Limits				
HTP (OEL TWA) [1]	2 mg/m³			
France - Occupational Exposure Limits				
VME (OEL TWA)	2 mg/m³ (alveolar fraction)			
Germany - Occupational Exposure Limits (TRGS 900)				
AGW (OEL TWA) [1]	1.25 mg/m³ (respirable fraction (dust) 10 mg/m³ (inhalable fraction (dust)			
Greece - Occupational Exposure Limits				
OEL TWA	10 mg/m³ (inhalable fraction) 5 mg/m³ (respirable fraction)			
Hungary - Occupational Exposure Limits				
AK (OEL TWA)	5 mg/m³ (inhalable concentration (flying and fibrous powders) 2 mg/m³ (respirable concentration (flying and fibrous powders)			

Tel.: (86) 755 88286998



Graphite (7782-42-5)			
Ireland - Occupational Exposure Limits			
OEL TWA [1]	2 mg/m³ (all forms except fibres; respirable fraction)		
OEL STEL	6 mg/m³ (calculated-all forms except fibres; respirable fraction)		
Latvia - Occupational Exposure Limits			
OEL TWA	2 mg/m³ (Carbon dust)		
Lithuania - Occupational Exposure Limits			
IPRV (OEL TWA)	5 mg/m³ (dust)		
Poland - Occupational Exposure Limits			
NDS (OEL TWA)	4 mg/m³ (natural-inhalable fraction) 1 mg/m³ (natural-respirable fraction)		
Portugal - Occupational Exposure Limits			
OEL TWA	2 mg/m³ (all forms except Graphite fibers-respirable fraction)		
Romania - Occupational Exposure Limits			
OEL TWA	2 mg/m³ (Quartz <=5%-dust, respirable fraction)		
Slovakia - Occupational Exposure Limits			
NPHV (OEL TWA) [1]	10 mg/m³ (total aerosol) 2 mg/m³ (respirable fraction)		
Spain - Occupational Exposure Limits			
VLA-ED (OEL TWA) [1]	2 mg/m³ (see UNE EN 481:1995 on workplace atmospheres-dust; respirable fraction)		
United Kingdom - Occupational Exposure Limited	its		
WEL TWA (OEL TWA) [1]	10 mg/m³ (inhalable dust) 4 mg/m³ (respirable dust)		
WEL STEL (OEL STEL)	30 mg/m³ (calculated-inhalable dust) 12 mg/m³ (calculated-respirable dust)		
Norway - Occupational Exposure Limits			
Grenseverdi (OEL TWA) [1]	5 mg/m³ (natural-total dust) 2 mg/m³ (natural-respirable dust) 10 mg/m³ (synthetic-total dust) 4 mg/m³ (synthetic-respirable dust)		
Korttidsverdi (OEL STEL)	10 mg/m³ (natural-total dust) 4 mg/m³ (natural-respirable dust) 20 mg/m³ (synthetic-total dust) 8 mg/m³ (synthetic-respirable dust)		
Switzerland - Occupational Exposure Limits			
MAK (OEL TWA) [1]	3 mg/m³ (natural-respirable dust) 3 mg/m³ (total dust limit values-respirable fractions) 10 mg/m³ (total dust limit values-inhalable fractions)		

Tel.: (86) 755 88286998

Technical Report No. 68.413.24.0007.01 Rev. 01



Dated 2024-01-26

Graphite (7782-42-5)

USA - ACGIH - Occupational Exposure Limits

ACGIH OEL TWA

2 mg/m³ (all forms except graphite fibers-respirable particulate matter)

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2.1. Appropriate engineering controls

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

8.2.2.1. Eye and face protection

Eye protection:

Not required

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

Not required

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid
Appearance : Silver solid
Colour : Silver

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



: No data available. Odour Not available Odour threshold Melting point : Not available Freezing point : Not available Boiling point : Not available Flammability : Non flammable. Explosive properties : Not explosive. Oxidising properties : Non oxidizing. **Explosive limits** : Not available Lower explosion limit : Not available Upper explosion limit : Not available Flash point : Not available : Not available Auto-ignition temperature Decomposition temperature : Not available : Not available рΗ pH solution : Not available : Not applicable. Viscosity, kinematic Not available Solubility Partition coefficient n-octanol/water (Log Kow) : Not available Vapour pressure Not available Not available Vapour pressure at 50°C Not available Density Relative density Not available Relative vapour density at 20°C Not available Particle size Not available Particle size distribution Not available Particle shape Not available Particle aspect ratio Not available Not available Particle aggregation state Particle agglomeration state Not available Particle specific surface area : Not available Particle dustiness No data available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. No deformation, destruction, crushed, disassemble, overcharge, short circuit. Prolonged exposure to damp conditions

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch TÜV SÜD Group Building 12 & 13, Zhiheng Wisdomland Business Park,

Cuarkey Fry Nantau Nanahar District

Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong 518052 China

Tel.: (86) 755 88286998



10.5. Incompatible materials

Strong acids. Strong bases. Oxidizing agent.

10.6. Hazardous decomposition products

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

SECTION 11: Toxicological information

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acute toxicity (inhalation)	Not classified			
Cobaltate (CoO21-), lithium (12190-79-3)				
LD50 oral rat	> 5000 mg/kg			
LD50 dermal rat	> 2000 mg/kg			
LC50 Inhalation - Rat	> 5.05 mg/l/4h			
Phosphate(1-), hexafluoro-, lithium (21324	1-40-3)			
LD50 oral rat	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)			
Graphite (7782-42-5)				
LC50 Inhalation - Rat	> 2000 mg/m³ (Exposure time: 4 h)			
Skin corrosion/irritation : Serious eye damage/irritation : Respiratory or skin sensitisation : Germ cell mutagenicity : Carcinogenicity :	Not classified Not classified Not classified Not classified Not classified			
Reproductive toxicity :	Not classified			
Phosphate(1-), hexafluoro-, lithium (21324	4-40-3)			
NOAEL (animal/male, F0/P)	500 mg/kg bodyweight Animal: rat, Animal sex: male			
STOT-single exposure : STOT-repeated exposure :	Not classified Not classified			
Phosphate(1-), hexafluoro-, lithium (21324-40-3)				
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.			
Graphite (7782-42-5)				
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.000279 mg/l air Animal: rat, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)			

Aspiration hazard : Not classified

Tel.: (86) 755 88286998

Technical Report No. 68.413.24.0007.01 Rev. 01



Dated 2024-01-26

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

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

11.2.2. Other information

Other information : No information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term

adverse effects in the environment.

Hazardous to the aquatic environment, short-

term (acute)

: Not classified

Hazardous to the aquatic environment, long-

term (chronic)

: Not classified

Graphite (7782-42-5)	
LC50 fish 1	> 100 mg/l Danio rerio
EC50 Daphnia 1	> 100 mg/l Daphnia magna
EC50 72h algae (1)	> 100 mg/l Pseudokirchneriella subcapitata

12.2. Persistence and degradability

Rechargeable Li-ion Battery	
Persistence and degradability	No information available.

Cobalt lithium dioxide (12190-79-3)		
Persistence and degradability	No information available.	

12.3. Bioaccumulative potential

Rechargeable Li-ion Battery		
Bioaccumulative potential	No information available.	

Cobalt lithium dioxide (12190-79-3)	
Bioaccumulative potential	No information available.

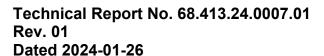
12.4. Mobility in soil

Rechargeable Li-ion Battery		
Ecology - soil	No information available.	

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

Page: 10 of 15

Tel.: (86) 755 88286998





Cobalt lithium dioxide (12190-79-3)	
Ecology - soil	Slightly soluble in water.

12.5. Results of PBT and vPvB assessment

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Endocrine disrupting properties

endocrine disrupting properties

Adverse effects on the environment caused by : 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

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

Contaminated packaging

: Dispose of contents/container in accordance with licensed collector's sorting instructions. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG(IMDG CODE 41-22) / IATA (DGR 65th) / ADN

ADR	IMDG	IATA	ADN	RID	
14.1. UN number	14.1. UN number				
UN 3480	UN 3480	UN 3480	UN 3480	UN 3480	
14.2. UN proper shipp	ing name				
LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	Lithium ion batteries	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	
Transport document des	cription				
UN 3480 LITHIUM ION BATTERIES, 9A, (E)	UN 3480 LITHIUM ION BATTERIES, 9	UN 3480 Lithium ion batteries, 9A	UN 3480 LITHIUM ION BATTERIES, 9A	UN 3480 LITHIUM ION BATTERIES, 9A	
14.3. Transport hazard class(es)					
9	9	9	9	9	

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

Page: 11 of 15

Tel.: (86) 755 88286998

Technical Report No. 68.413.24.0007.01 Rev. 01















14.4. Packing group

| Not applicable |
|----------------|----------------|----------------|----------------|----------------|
| 1 | | | | |

14.5. Environmental hazards

Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
	1			I

No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M4

Special provisions (ADR) : 188, 230, 310, 348, 376, 377, 387, 636

Limited quantities (ADR) : 0
Excepted quantities (ADR) : E0

Packing instructions (ADR) : P903, P909, P910, P911, LP903, LP904, LP905, LP906

Transport category (ADR) : 2
Tunnel restriction code (ADR) : E
EAC code : 2Y

Transport by sea

Special provisions (IMDG) : 188, 230, 310, 348, 376, 377, 384, 387

Limited quantities (IMDG) : 0
Excepted quantities (IMDG) : E0

Packing instructions (IMDG) : P903, P908, P909, P910, P911, LP903, LP904, LP905, LP906

EmS-No. (Fire) : F-A
EmS-No. (Spillage) : S-I
Stowage category (IMDG) : A
Stowage and handling (IMDG) : SW19

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.

Air transport

PCA Excepted quantities (IATA) : E0
PCA Limited quantities (IATA) : Forbidden
PCA limited quantity max net quantity (IATA) : Forbidden
PCA packing instructions (IATA) : Forbidden
PCA max net quantity (IATA) : Forbidden
CAO packing instructions (IATA) : See 965
CAO max net quantity (IATA) : See 965

Special provisions (IATA) : A88, A99, A154, A164, A183, A201, A213, A331, A334, A802

ERG code (IATA) : 12FZ

Inland waterway transport

Classification code (ADN) : M4

Special provisions (ADN) : 188, 230, 310, 348, 376, 377, 387, 636

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

Tel.: (86) 755 88286998

TÜV SÜD Group

Building 12 & 13, Zhiheng Wisdomland Business Park,

Guankou Erlu, Nantou, Nanshan District, Shenzhen, Guangdong 518052 China

Page: 12 of 15

Technical Report No. 68.413.24.0007.01 **Rev. 01**



Dated 2024-01-26

Limited quantities (ADN) : 0 Excepted quantities (ADN) : E0 Equipment required (ADN) : PP Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID)

Special provisions (RID) : 188, 230, 310, 348, _376, 377, 387, 636

Limited quantities (RID) : 0 Excepted quantities (RID) : E0

: P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906 Packing instructions (RID)

Transport category (RID) : CE2 Colis express (express parcels) (RID) Hazard identification number (RID) . 90

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:	
No information available.	

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

Page: 13 of 15

Tel.: (86) 755 88286998



Abbreviations and ac	ronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BLV	Biological limit value	
CAS-No.	Chemical Abstract Service number	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC50	Median effective concentration	
EC-No.	European Community number	
EN	European Standard	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OEL	Occupational Exposure Limit	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	

Data sources : Loli. ECHA reference.

Training advice : Normal use of this product shall imply use in accordance with the instructions on

the packaging.

Full text of H- and EUH-statements:	
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A

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



STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1	
H301	Toxic if swallowed.	
H314	Causes severe skin burns and eye damage.	
H318	Causes serious eye damage.	
H372	Causes damage to organs through prolonged or repeated exposure.	

Safety Data Sheet (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.



Tel.: (86) 755 88286998