

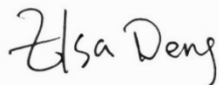
Safety Data Sheet

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

Applicant: BMZ USA Inc.
Address: 1429 Miller Store Road
Virginia Beach, VA, 23455
USA
Sample Description: Li-ion Battery Pack
Model No.: 107724

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

Prepared by:



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Reviewed by:



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Designated Reviewer

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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

1.1. Product identifier

Product form : Article
Trade name : Li-ion Battery Pack
Model No. : 107724
Ratings : 36Vd.c, 12.8Ah, 461Wh

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

Restrictions on use : No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

EVE Hyperpower Lithium Batteries Inc.
Room205, No.15 Building, No.99 Binwan road, Binhai New district,
Fenghua District, Ningbo City, P. R. China
T 86-13828810395
048723@evebattery.com

1.4. Emergency telephone number

Emergency number : 86-13828810395

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

PBT: not yet assessed

vPvB: not yet assessed

Contains no PBT/vPvB substances $\geq 0.1\%$ 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

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]
Cobalt lithium manganese nickel oxide	CAS-No.: 182442-95-1	35.05	Not classified
Graphite	CAS-No.: 7782-42-5 EC-No.: 231-955-3 REACH-no: No information available	15.98	Not classified
1-Propene, 1,1,2,3,3,3-hexafluoro-, polymer with 1,1-difluoroethene	CAS-No.: 9011-17-0 EC-No.: 618-470-6	9.87	Not classified
Aluminum	CAS-No.: 7429-90-5 EC-No.: 231-072-3 EC Index-No.: 013-002-00-1	9.38	Flam. Sol. 1, H228 Water-react. 2, H261
Copper	CAS-No.: 7440-50-8 EC-No.: 231-159-6 EC Index-No.: 029-024-00-X	8.39	Aquatic Chronic 2, H411
1,3-Dioxolan-2-one	CAS-No.: 96-49-1 EC-No.: 202-510-0	6.34	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 STOT RE 2, H373
Dimethyl carbonate	CAS-No.: 616-38-6 EC-No.: 210-478-4 EC Index-No.: 607-013-00-6	4.38	Flam. Liq. 2, H225
Phosphate(1-), hexafluoro-, lithium	CAS-No.: 21324-40-3 EC-No.: 244-334-7	2.95	Acute Tox. 3 (Oral), H301 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT RE 1, H372
Diethyl carbonate	CAS-No.: 105-58-8 EC-No.: 203-311-1	2.76	Flam. Liq. 2, H225
Carbonate, methyl ethyl	CAS-No.: 623-53-0 EC-No.: 433-480-9	2.29	Flam. Liq. 2, H225
Propylene carbonate	CAS-No.: 108-32-7 EC-No.: 203-572-1 EC Index-No.: 607-194-00-1	1.11	Eye Irrit. 2, H319
Carbon black	CAS-No.: 1333-86-4 EC-No.: 215-609-9;435-640-3	0.79	Not classified



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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Rubber, butadiene styrene	CAS-No.: 61789-96-6 EC-No.: 451-360-4;612-382-1	0.71	Not classified

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

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If symptoms persist, call a physician.
- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. 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 are necessary.
- First-aid measures after eye contact : Not an expected route of exposure.
- First-aid measures after ingestion : Not an expected route of exposure. Call a poison center or a doctor if you feel unwell.

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

No additional information available

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Water spray. Dry powder. Foam.
- Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

- Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters

- Precautionary measures fire : Eliminate every possible source of ignition. Keep container tightly closed and away from heat, sparks and flame.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
- Other information : 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. Cool containers / tanks with spray water if possible. Stay upwind.

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.

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6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Prevent material from contaminating soil and from entering sewers or waterways.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Mechanically recover the product. Stop the leak if safe to do so. Contain the spilled liquid with dry sand or earth. Clean up spills immediately. Absorb spilled material with an inert absorbent (dry sand or earth). Scoop contaminated absorbent into an acceptable waste container. Collect all contaminated absorbent and dispose of according to directions in Section 13. Scrub the area with detergent and water; collect all contaminated wash water for proper disposal.

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. Don't handling the batteries in manner that allows terminals to short circuit. Do not open, disassemble, crush or burn battery.

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

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Avoid high temperatures. Store in a dry place. Keep container tightly closed. Store in a well-ventilated place. Keep cool. If the battery is subject to storage for such a long term as more than 3 months, it is recommended to recharge the battery periodically. Do not storage the battery haphazardly in a box or drawer where they may short-circuit each other or be short-circuited by other metal objects. Keep out of reach of children. Do not expose the battery to heat or fire. Avoid storage in direct sunlight. Do not store together with oxidizing and acidic materials.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Graphite (7782-42-5)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	5 mg/m ³ (alveolar dust with <1% Quartz, respirable fraction)
MAK (OEL STEL)	10 mg/m ³ (alveolar dust with <1% Quartz, respirable fraction)

Graphite (7782-42-5)	
Belgium - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (except fibers-alveolar fraction)
Bulgaria - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (inhalable fraction)
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	4 mg/m ³ (respirable dust) 10 mg/m ³ (total dust, inhalable particles)
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	2 mg/m ³ (dust)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	2.5 mg/m ³ (natural-respirable)
Estonia - Occupational Exposure Limits	
OEL TWA	5 mg/m ³ (total dust (Dusts))
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	2 mg/m ³
France - Occupational Exposure Limits	
VME (OEL TWA)	2 mg/m ³ (alveolar fraction)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	1.25 mg/m ³ (respirable fraction (dust)) 10 mg/m ³ (inhalable fraction (dust))
Greece - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (inhalable fraction) 5 mg/m ³ (respirable fraction)
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	5 mg/m ³ (respirable)
Ireland - Occupational Exposure Limits	
OEL TWA [1]	2 mg/m ³ (all forms except fibres; respirable fraction)
OEL STEL	6 mg/m ³ (calculated-all forms except fibres; respirable fraction)
Latvia - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (Carbon dust)
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	5 mg/m ³ (dust)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	4 mg/m ³ (natural-inhalable fraction) 1 mg/m ³ (natural-respirable fraction)

Graphite (7782-42-5)	
Portugal - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (all forms except Graphite fibers-respirable fraction)
Romania - Occupational Exposure Limits	
OEL TWA	2 mg/m ³ (Quartz <=5%-dust, respirable fraction)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	2 mg/m ³ (see UNE EN 481:1995 on workplace atmospheres-dust; respirable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m ³ (inhalable dust) 4 mg/m ³ (respirable dust)
WEL STEL (OEL STEL)	30 mg/m ³ (calculated-inhalable dust) 12 mg/m ³ (calculated-respirable dust)
Norway - Occupational Exposure Limits	
Grønseverdi (OEL TWA) [1]	5 mg/m ³ (natural-total dust) 2 mg/m ³ (natural-respirable dust) 10 mg/m ³ (synthetic-total dust) 4 mg/m ³ (synthetic-respirable dust)
Korttidsverdi (OEL STEL)	10 mg/m ³ (natural-total dust) 4 mg/m ³ (natural-respirable dust) 20 mg/m ³ (synthetic-total dust) 8 mg/m ³ (synthetic-respirable dust)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	3 mg/m ³ (natural-respirable dust)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	2 mg/m ³ (all forms except graphite fibers-respirable particulate matter)
Aluminum (7429-90-5)	
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	10 mg/m ³ (inhalable fraction)
MAK (OEL STEL)	20 mg/m ³ (inhalable fraction)
Belgium - Occupational Exposure Limits	
OEL TWA	1 mg/m ³
Bulgaria - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (inhalable fraction) 1.5 mg/m ³ (respirable fraction)
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	10 mg/m ³ (total dust, inhalable particles) 4 mg/m ³ (respirable dust)

Aluminum (7429-90-5)	
Croatia - Biological limit values	
BLV	200 µg/l Parameter: Aluminum - Medium: urine - Sampling time: at the end of the work shift
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	10 mg/m ³ (dust)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	5 mg/m ³ (dust and powder; total) 2 mg/m ³ (dust and powder; respirable)
Estonia - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
France - Occupational Exposure Limits	
VME (OEL TWA)	10 mg/m ³ (metal) 5 mg/m ³ (dust)
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	1.25 mg/m ³ (respirable fraction (dust)) 10 mg/m ³ (inhalable fraction (dust))
Germany - Biological limit values (TRGS 903)	
Biological limit value	50 µg/g creatinine Parameter: Aluminum - Medium: urine - Sampling time: for long-term exposures: at the end of the shift after several shifts
Greece - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (inhalable fraction) 5 mg/m ³ (respirable fraction)
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	1 mg/m ³ (respirable dust)
Ireland - Occupational Exposure Limits	
OEL TWA [1]	1 mg/m ³ (respirable fraction)
OEL STEL	3 mg/m ³ (calculated-respirable dust)
Latvia - Occupational Exposure Limits	
OEL TWA	2 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	5 mg/m ³ (inhalable fraction) 2 mg/m ³ (respirable fraction) 1 mg/m ³
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	2.5 mg/m ³ (non-stabilized-inhalable fraction) 1.2 mg/m ³ (non-stabilized-respirable fraction)

Aluminum (7429-90-5)	
Portugal - Occupational Exposure Limits	
OEL TWA	10 mg/m ³ (metal dust)
OEL chemical category	A4 - Not Classifiable as a Human Carcinogen
Romania - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ (dust) 1 mg/m ³ (fume)
OEL STEL	10 mg/m ³ (dust) 3 mg/m ³ (fume)
Romania - Biological limit values	
BLV	200 µg/l Parameter: Aluminum - Medium: urine - Sampling time: end of shift
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	4 mg/m ³ (inhalable dust) 1.5 mg/m ³ (respirable dust)
Slovakia - Biological limit values	
BLV	60 µg/g creatinine Parameter: Aluminum - Medium: urine - Sampling time: not critical
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	1 mg/m ³ (see UNE EN 481:1995 on workplace atmospheres-respirable fraction)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	5 mg/m ³ (total dust) 2 mg/m ³ (respirable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m ³ (inhalable dust) 4 mg/m ³ (respirable dust)
WEL STEL (OEL STEL)	30 mg/m ³ (calculated-inhalable dust) 12 mg/m ³ (calculated-respirable dust)
Norway - Occupational Exposure Limits	
Grænseverdi (OEL TWA) [1]	5 mg/m ³ (pyrotechnical-powder)
Korttidsverdi (OEL STEL)	10 mg/m ³ (pyrotechnical-powder)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	3 mg/m ³ (respirable dust)
Switzerland - BAT	
BAT	50 µg/g creatinine Parameter: Aluminum - Medium: urine - Sampling time: after several shifts (for long-term exposures)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	1 mg/m ³ (respirable particulate matter)
ACGIH chemical category	Not Classifiable as a Human Carcinogen

Carbon black (1333-86-4)	
Belgium - Occupational Exposure Limits	
OEL TWA	3 mg/m ³
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	3.5 mg/m ³
KGVI (OEL STEL)	7 mg/m ³
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	2 mg/m ³ (dust)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	3.5 mg/m ³
Estonia - Occupational Exposure Limits	
OEL TWA	3 mg/m ³ (dust (Dusts))
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	3.5 mg/m ³
HTP (OEL STEL)	7 mg/m ³
France - Occupational Exposure Limits	
VME (OEL TWA)	3.5 mg/m ³
Greece - Occupational Exposure Limits	
OEL TWA	3.5 mg/m ³
OEL STEL	7 mg/m ³
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	3 mg/m ³ (respirable (flying and fibrous powders))
Ireland - Occupational Exposure Limits	
OEL TWA [1]	3 mg/m ³ (inhalable fraction)
OEL STEL	15 mg/m ³ (calculated-inhalable fraction)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	4 mg/m ³ (inhalable fraction)
Portugal - Occupational Exposure Limits	
OEL TWA	3 mg/m ³
OEL chemical category	A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	2 mg/m ³ (respirable fraction, 5% or less fibrogenic component) 10 mg/m ³ (respirable fraction, greater than 5% fibrogenic component) 10 mg/m ³ (total aerosol)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	3.5 mg/m ³

Carbon black (1333-86-4)	
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	3 mg/m ³ (inhalable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	3.5 mg/m ³
WEL STEL (OEL STEL)	7 mg/m ³
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	3.5 mg/m ³
Korttidsverdi (OEL STEL)	7 mg/m ³ (value calculated)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	3 mg/m ³ (inhalable particulate matter)
ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to Humans
Diethyl carbonate (105-58-8)	
Romania - Occupational Exposure Limits	
OEL TWA	700 mg/m ³
OEL TWA [ppm]	145 ppm
OEL STEL	1000 mg/m ³
OEL STEL [ppm]	207 ppm
Propylene carbonate (108-32-7)	
Germany - Occupational Exposure Limits (TRGS 900)	
AGW (OEL TWA) [1]	8.5 mg/m ³ (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
AGW (OEL TWA) [2]	2 ppm (the risk of damage to the embryo or fetus can be excluded when AGW and BGW values are observed)
Latvia - Occupational Exposure Limits	
OEL TWA	2 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	7 mg/m ³
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	25.5 mg/m ³
MAK (OEL TWA) [2]	6 ppm
KZGW (OEL STEL)	25.5 mg/m ³
KZGW (OEL STEL) [ppm]	6 ppm
Copper (7440-50-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
Local name	Copper

Copper (7440-50-8)	
IOEL TWA	0.01 mg/m ³ (respirable fraction)
Remark	(Year of adoption 2014)
Regulatory reference	SCOEL Recommendations
Austria - Occupational Exposure Limits	
MAK (OEL TWA)	1 mg/m ³ (inhalable fraction) 0.1 mg/m ³ (respirable fraction, smoke)
MAK (OEL STEL)	4 mg/m ³ (inhalable fraction) 0.4 mg/m ³ (respirable fraction, smoke)
Belgium - Occupational Exposure Limits	
OEL TWA	0.2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
Bulgaria - Occupational Exposure Limits	
OEL TWA	0.1 mg/m ³ (metal vapor)
Croatia - Occupational Exposure Limits	
GVI (OEL TWA) [1]	0.2 mg/m ³ (fume) 1 mg/m ³ (dust)
KGVI (OEL STEL)	2 mg/m ³ (dust)
Czech Republic - Occupational Exposure Limits	
PEL (OEL TWA)	1 mg/m ³ (dust) 0.1 mg/m ³ (fume)
Denmark - Occupational Exposure Limits	
OEL TWA [1]	1 mg/m ³ (dust and powder) 0.1 mg/m ³ (fume)
Estonia - Occupational Exposure Limits	
OEL TWA	1 mg/m ³ (total dust) 0.2 mg/m ³ (respirable dust)
Finland - Occupational Exposure Limits	
HTP (OEL TWA) [1]	0.02 mg/m ³ (respirable dust)
France - Occupational Exposure Limits	
VME (OEL TWA)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust)
VLE (OEL C/STEL)	2 mg/m ³ (dust)
Greece - Occupational Exposure Limits	
OEL TWA	0.2 mg/m ³ (fume) 1 mg/m ³ (dust)
OEL STEL	2 mg/m ³ (dust)

Copper (7440-50-8)	
Hungary - Occupational Exposure Limits	
AK (OEL TWA)	0.1 mg/m ³ 0.01 mg/m ³ (fume)
CK (OEL STEL)	0.2 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA [1]	0.2 mg/m ³ (fume) 1 mg/m ³ (dusts and mists)
OEL STEL	2 mg/m ³ (dusts and mists) 0.6 mg/m ³ (calculated-fume)
Latvia - Occupational Exposure Limits	
OEL TWA	0.5 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (OEL TWA)	1 mg/m ³ (inhalable fraction) 0.2 mg/m ³ (respirable fraction)
Netherlands - Occupational Exposure Limits	
TGG-8u (OEL TWA)	0.1 mg/m ³ (inhalable dust)
Poland - Occupational Exposure Limits	
NDS (OEL TWA)	0.2 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA	0.2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
Romania - Occupational Exposure Limits	
OEL TWA	0.5 mg/m ³ (dust)
OEL STEL	0.2 mg/m ³ (fume) 1.5 mg/m ³ (dust)
Slovakia - Occupational Exposure Limits	
NPHV (OEL TWA) [1]	1 mg/m ³ (inhalable fraction) 0.2 mg/m ³ (respirable fraction)
Spain - Occupational Exposure Limits	
VLA-ED (OEL TWA) [1]	0.1 mg/m ³ (see UNE EN 481:1995 on workplace atmospheres-respirable fraction)
Sweden - Occupational Exposure Limits	
NGV (OEL TWA)	0.01 mg/m ³ (respirable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	1 mg/m ³ (dust and mists) 0.2 mg/m ³ (fume)
WEL STEL (OEL STEL)	0.6 mg/m ³ (calculated-fume) 2 mg/m ³ (dust and mist)

Copper (7440-50-8)	
Norway - Occupational Exposure Limits	
Grenseverdi (OEL TWA) [1]	0.1 mg/m ³ (fume) 1 mg/m ³ (dust)
Korttidsverdi (OEL STEL)	3 mg/m ³ (value calculated-dust) 0.3 mg/m ³ (value calculated-fume)
Switzerland - Occupational Exposure Limits	
MAK (OEL TWA) [1]	0.1 mg/m ³ (inhalable dust)
KZGW (OEL STEL)	0.2 mg/m ³ (inhalable dust)
USA - ACGIH - Occupational Exposure Limits	
ACGIH OEL TWA	0.2 mg/m ³ (fume)

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. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Remove all sources of ignition. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. 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:

Protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of battery venting, provide as much ventilation as possible. Avoid confined areas with venting cell cores. Respiratory Protection is not necessary under conditions of normal use. Not necessary under conditions of normal use.

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
Colour	: Green
Appearance	: Green cylindrical solid.
Odour	: Odorless
Odour threshold	: Not available
Melting point	: >300 °C
Freezing point	: Not available
Boiling point	: Not available
Flammability	: Non flammable.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable.
Solubility	: Partial soluble in water
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: Not available
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
Particle aggregation state	: Not available
Particle agglomeration state	: Not available
Particle specific surface area	: Not available
Particle dustiness	: Not 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

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

If leaked, forbidden to contact with strong oxidizers ,mineral acids ,strong alkalis, halogenated hydrocarbons.

10.4. Conditions to avoid

Heat above 70°C or Incinerate, Deform, Mutilate, Crush, Disassemble, Overcharge, Short circuit, Expose over a long period to humid conditions.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Toxic Fumes, and may form peroxides.

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

Graphite (7782-42-5)	
LC50 Inhalation - Rat	> 2000 mg/m ³ (Exposure time: 4 h)
1,3-Dioxolan-2-one (96-49-1)	
LD50 oral rat	10 g/kg
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	> 26420 mg/kg
LC50 Inhalation - Rat	> 730 mg/m ³ (Exposure time: 8 h)
Phosphate(1-), hexafluoro-, lithium (21324-40-3)	
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)
Aluminum (7429-90-5)	
LC50 Inhalation - Rat	> 0.888 mg/l/4h
Cobalt lithium manganese nickel oxide (182442-95-1)	
LC50 Inhalation - Rat	0.05 – 0.5 mg/l/4h
Carbon black (1333-86-4)	
LD50 oral rat	> 15400 mg/kg
LD50 dermal rabbit	> 8000 mg/kg Source: ECHA
LC50 Inhalation - Rat	> 4.6 mg/l/4h

Dimethyl carbonate (616-38-6)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit
LC50 Inhalation - Rat	> 5.36 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Carbonate, methyl ethyl (623-53-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 17.6 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Diethyl carbonate (105-58-8)	
LD50 oral rat	4876 mg/kg
LC50 Inhalation - Rat	19500 mg/m ³
Propylene carbonate (108-32-7)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 3000 mg/kg
Copper (7440-50-8)	
LC50 Inhalation - Rat	> 5.11 mg/l/4h
Rubber, butadiene styrene (61789-96-6)	
LD50 oral rat	71300 µl/kg
Skin corrosion/irritation	: Not classified
Propylene carbonate (108-32-7)	
pH	8.8
Serious eye damage/irritation	: Not classified
Propylene carbonate (108-32-7)	
pH	8.8
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Cobalt lithium manganese nickel oxide (182442-95-1)	
IARC group	1 - Carcinogenic to humans
Carbon black (1333-86-4)	
IARC group	2B - Possibly carcinogenic to humans
Reproductive toxicity	: Not classified

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Phosphate(1-), hexafluoro-, lithium (21324-40-3)	
NOAEL (animal/male, F0/P)	500 mg/kg bodyweight Animal: rat, Animal sex: male
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
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)
1,3-Dioxolan-2-one (96-49-1)	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 452 (Chronic Toxicity Studies)
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Phosphate(1-), hexafluoro-, lithium (21324-40-3)	
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure.
Carbon black (1333-86-4)	
LOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0071 mg/l air Animal: rat, Animal sex: male
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0.0011 mg/l air Animal: rat, Animal sex: male
Carbonate, methyl ethyl (623-53-0)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity in Rodents), Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral))
Propylene carbonate (108-32-7)	
NOAEL (oral, rat, 90 days)	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Aspiration hazard	: Not classified
Rechargeable Li-ion Cell	
Viscosity, kinematic	Not applicable.
Graphite (7782-42-5)	
Viscosity, kinematic	Not applicable.
1,3-Dioxolan-2-one (96-49-1)	
Viscosity, kinematic	Not applicable.
Carbon black (1333-86-4)	
Viscosity, kinematic	Not applicable.
Dimethyl carbonate (616-38-6)	
Viscosity, kinematic	0.552 mm ² /s

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

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 Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	19 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	7.2 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	47 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
1,3-Dioxolan-2-one (96-49-1)	
LC50 - Fish [1]	> 100 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)
Phosphate(1-), hexafluoro-, lithium (21324-40-3)	
EC50 96h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC chronic fish	4 mg/l Test organisms (species): Duration: '21 d'
Carbon black (1333-86-4)	
LC50 - Fish [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 10000 mg/l Test organisms (species):
ErC50 algae	> 10000 mg/l Source: EHCA
Dimethyl carbonate (616-38-6)	
LC50 - Fish [1]	≥ 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)

Dimethyl carbonate (616-38-6)	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
NOEC (chronic)	25 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
Carbonate, methyl ethyl (623-53-0)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 62 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
Diethyl carbonate (105-58-8)	
LC50 - Fish [1]	100 mg/l
EC50 - Crustacea [1]	100 mg/l
EC50 72h - Algae [1]	100 mg/l
Propylene carbonate (108-32-7)	
LC50 - Fish [1]	> 1000 mg/l Test organisms (species): Cyprinus carpio
EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 929 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	> 929 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
Copper (7440-50-8)	
LC50 - Fish [1]	0.0068 – 0.0156 mg/l (Exposure time: 96 h - Species: Pimephales promelas)
LC50 - Fish [2]	< 0.3 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 - Crustacea [1]	0.03 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])
EC50 72h - Algae [1]	0.0426 – 0.0535 mg/l (Species: Pseudokirchneriella subcapitata [static])
EC50 96h - Algae [1]	0.031 – 0.054 mg/l (Species: Pseudokirchneriella subcapitata [static])

12.2. Persistence and degradability

Diethyl carbonate (105-58-8)	
Persistence and degradability	Readily biodegradable.

12.3. Bioaccumulative potential

1,3-Dioxolan-2-one (96-49-1)	
Partition coefficient n-octanol/water (Log Pow)	0.11 (at 20 °C (at pH >5.33-<5.79))



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Dimethyl carbonate (616-38-6)	
Partition coefficient n-octanol/water (Log Pow)	0.354 (at 20 °C (at pH >6.5-<7.5))
Carbonate, methyl ethyl (623-53-0)	
Partition coefficient n-octanol/water (Log Pow)	0.972 (at 40 °C (at pH 6.8))
Diethyl carbonate (105-58-8)	
Partition coefficient n-octanol/water (Log Pow)	1.21
Propylene carbonate (108-32-7)	
Partition coefficient n-octanol/water (Log Pow)	0.48 (at 25 °C)

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Rechargeable Li-ion Cell
PBT: not yet assessed
vPvB: not yet assessed

12.6. Endocrine disrupting properties

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

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. Destroy the product by incineration (in accordance with local and national regulations).






Contaminated packaging : 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.

SECTION 14: Transport information

The product can be shipped in two ways. When it is shipped alone, the UN number is 3480. When it is shipped in equipment, the UN number is 3481.

PART I (shipped alone)

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3480	UN 3480	UN 3480	UN 3480	UN 3480
14.2. UN proper shipping name				
LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	Lithium ion batteries	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES
Transport document description				
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
				
14.4. Packing group				
Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
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
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, P908, 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, A206, 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
 Limited quantities (ADN) : 0
 Excepted quantities (ADN) : E0
 Equipment required (ADN) : PP
 Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M4
 Special provisions (RID) : 188, 230, 310, 348, 376, 377, 387, 636
 Limited quantities (RID) : 0
 Excepted quantities (RID) : E0
 Packing instructions (RID) : P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906
 Transport category (RID) : 2
 Colis express (express parcels) (RID) : CE2
 Hazard identification number (RID) : 90






14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

PART 2(shipped in equipment)

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
UN 3481	UN 3481	UN 3481	UN 3481	UN 3481
14.2. UN proper shipping name				
LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	Lithium ion batteries packed with equipment	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT

ADR	IMDG	IATA	ADN	RID
Transport document description				
UN 3481 LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT, 9A, (E)	UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT, 9	UN 3481 Lithium ion batteries packed with equipment, 9A	UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT, 9A	UN 3481 LITHIUM ION BATTERIES PACKED WITH EQUIPMENT, 9A
14.3. Transport hazard class(es)				
9	9	9	9	9
				
14.4. Packing group				
Not applicable.	Not applicable.	Not applicable.	Not applicable.	Not applicable.
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
No supplementary information available				

14.6. Special precautions for user

Overland transport

Classification code (ADR) : M4
 Special provisions (ADR) : 188, 230, 310, 348, 360, 376, 377, 387, 390, 670
 Limited quantities (ADR) : 0
 Excepted quantities (ADR) : E0
 Packing instructions (ADR) : P903, P908, 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, 360, 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) : 966
PCA max net quantity (IATA) : 5kg
CAO packing instructions (IATA) : 966
CAO max net quantity (IATA) : 35kg
Special provisions (IATA) : A88, A99, A154, A164, A181, A185, A206, A213, A802
ERG code (IATA) : 12FZ

Inland waterway transport

Classification code (ADN) : M4
Special provisions (ADN) : 188, 230, 310, 348, 360, 376, 377, 387, 390, 670
Limited quantities (ADN) : 0
Excepted quantities (ADN) : E0
Equipment required (ADN) : PP
Number of blue cones/lights (ADN) : 0

Rail transport

Classification code (RID) : M4
Special provisions (RID) : 188, 230, 310, 348, 360, _376, 377, 387, 390, 670
Limited quantities (RID) : 0
Excepted quantities (RID) : E0
Packing instructions (RID) : P903, 908, 909, P910, P911, LP903, LP904, LP905, LP906
Transport category (RID) : 2
Colis express (express parcels) (RID) : CE2
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 Annex XVII (Restriction List)**

Not applicable.

REACH Annex XIV (Authorisation List)

Not applicable.

REACH Candidate List (SVHC)

Contains no substance on the REACH candidate list

PIC Regulation (Prior Informed Consent)

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.

POP Regulation (Persistent Organic Pollutants)

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

Ozone Regulation (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.

Explosives Precursors Regulation (2019/1148)

Contains no 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.

Drug Precursors Regulation (273/2004)

Contains no substance subject to Regulation (EC) 273/2004 of the European Parliament and of the Council of 11 February 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

Abbreviations and acronyms:	
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
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
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration

Abbreviations and acronyms:	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disrupting properties

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
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Sol. 1	Flammable solids, Category 1
H225	Highly flammable liquid and vapour.
H228	Flammable solid.
H261	In contact with water releases flammable gases.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Skin Corr. 1A	Skin corrosion/irritation, Category 1, Sub-Category 1A
STOT RE 1	Specific target organ toxicity – Repeated exposure, Category 1



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Full text of H- and EUH-statements:

STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
Water-react. 2	Substances and Mixtures which, in contact with water, emit flammable gases, Category 2

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.

-----End of Report-----

