



Safety Data Sheet

Regulation (EU) 2015/830 (REACH Annex II)

Applicant: Rifen International Ltd.

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

Attn.: Mr. Richard Felen

Sample Description: Cell

Model No.: 8965113-9000mAh

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

1.1. Product identifier

Product form : Article
Product name : Cell
Model No : 8965113-9000mAh

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

1.2.1. Relevant identified uses

Main use category : No information available

1.2.2. Uses advised against

Restrictions on use : No information available

1.3. Details of the supplier of the safety data sheet

Supplier : Rifin International Ltd
Address : Unit 601, 6/F, Apec Plaza, 49 Hoi Yuen Road, Kwun Tong, Kowloon, Hong Kong
Zip Code : No information available
Tel : +86752-2091659
Fax : +86852-2325 6698
E-mail : herman@rifin-international.com

1.4. Emergency telephone number

+86 159 8996 3919

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] Extra labelling to display/extra classification(s) to display

No labelling applicable

Hazard pictograms (CLP) : None
Signal word (CLP) : None
Hazard statements (CLP) : Not applicable
Precautionary statements (CLP) : Not applicable
EU Specific Hazard Statements : None

2.3. Other hazards

No additional information available

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]
Cobaltate (CoO21-), lithium	(CAS-No.) 12190-79-3 (EC-No.) 235-362-0	42.1	Not classified
Graphite	(CAS-No.) 7782-42-5 (EC-No.) 231-955-3	22.4	Not classified
Ethylene carbonate	(CAS-No.) 96-49-1 (EC-No.) 202-510-0	13.8	Not classified
Copper	(CAS-No.) 7440-50-8 (EC-No.) 231-159-6	8.9	Not classified
Aluminum	(CAS-No.) 7429-90-5 (EC-No.) 231-072-3 (EC Index-No.) 013-002-00-1	5.3	Flam. Sol. 1, H228 Water-react. 2, H261
Phosphate(1-), hexafluoro-, lithium	(CAS-No.) 21324-40-3 (EC-No.) 244-334-7	1.9	Not classified

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show directions for use or safety data sheet if possible).
- 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 : Rinse mouth out with water. If you feel unwell, seek medical advice.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 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 inhalation of vapors. Move containers from fire area if it can be done without personal risk. Cool tanks/drums with water spray/remove them into safety. 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 : Evacuate personnel to safe areas. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Avoid contact with skin, eyes and inhalation of vapors.

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".

Emergency procedures : Stop leak if safe to do so. Do not touch spilled material; Avoid breathing dust, mist or spray; Remove all sources of ignition

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : 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.

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 : Prohibited high temperature storage. Store in a well-ventilated place. Store in a dry place. Keep container tightly closed. Keep cool.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Copper (7440-50-8)	
Austria - Occupational Exposure Limits	
MAK (mg/m ³)	1 mg/m ³ (inhalable fraction) 0.1 mg/m ³ (respirable fraction, smoke)
MAK Short time value (mg/m ³)	4 mg/m ³ (inhalable fraction) 0.4 mg/m ³ (respirable fraction, smoke)



Copper (7440-50-8)	
Belgium - Occupational Exposure Limits	
Limit value (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m ³)	0.1 mg/m ³ (metal vapor)
Croatia - Occupational Exposure Limits	
GVI (granična vrijednost izloženosti) (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust)
KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	2 mg/m ³ (fume and dust)
Czech Republic - Occupational Exposure Limits	
Expoziční limity (PEL) (mg/m ³)	1 mg/m ³ (dust) 0.1 mg/m ³ (fume)
Denmark - Occupational Exposure Limits	
Grænseværdie (langvarig) (mg/m ³)	1 mg/m ³ (dust and powder) 0.1 mg/m ³ (fume)
Estonia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	1 mg/m ³ (total dust) 0.2 mg/m ³ (respirable dust)
Finland - Occupational Exposure Limits	
HTP-arvo (8h) (mg/m ³)	0.02 mg/m ³ (respirable dust)
France - Occupational Exposure Limits	
VME (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust)
VLE (mg/m ³)	2 mg/m ³ (dust)
Greece - Occupational Exposure Limits	
OEL TWA (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust)
OEL STEL (mg/m ³)	2 mg/m ³ (dust)
Hungary - Occupational Exposure Limits	
AK-érték	1 mg/m ³ 0.1 mg/m ³ (fume)



Copper (7440-50-8)	
CK-érték	4 mg/m ³ 0.4 mg/m ³ (fume)
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dusts and mists)
OEL (15 min ref) (mg/m ³)	2 mg/m ³ (dusts and mists) 0.6 mg/m ³ (calculated-fume)
Latvia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	0.5 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	1 mg/m ³ (inhalable fraction) 0.2 mg/m ³ (respirable fraction)
Netherlands - Occupational Exposure Limits	
Grenswaarde TGG 8H (mg/m ³)	0.1 mg/m ³ (inhalable fraction)
Poland - Occupational Exposure Limits	
NDS (mg/m ³)	0.2 mg/m ³
Portugal - Occupational Exposure Limits	
OEL TWA (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
Romania - Occupational Exposure Limits	
OEL TWA (mg/m ³)	0.5 mg/m ³ (powder)
OEL STEL (mg/m ³)	0.2 mg/m ³ (fume) 1.5 mg/m ³ (dust)
Slovakia - Occupational Exposure Limits	
NPHV (priemerná) (mg/m ³)	1 mg/m ³ (inhalable fraction) 0.2 mg/m ³ (respirable fraction)
Slovenia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	1 mg/m ³ (inhalable fraction) 0.1 mg/m ³ (respirable fraction, fume)
OEL STEL (mg/m ³)	4 mg/m ³ (inhalable fraction) 0.4 mg/m ³ (respirable fraction, fume)



Copper (7440-50-8)	
Spain - Occupational Exposure Limits	
VLA-ED (mg/m ³)	0.2 mg/m ³ (fume) 1 mg/m ³ (dust and mist)
Sweden - Occupational Exposure Limits	
nivågränsvärde (NVG) (mg/m ³)	0.01 mg/m ³ (respirable dust)
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m ³)	1 mg/m ³ (dust and mists) 0.2 mg/m ³ (fume)
WEL STEL (mg/m ³)	0.6 mg/m ³ (calculated-fume) 2 mg/m ³ (dust and mist)
Norway - Occupational Exposure Limits	
Grenseverdier (AN) (mg/m ³)	0.1 mg/m ³ (fume) 1 mg/m ³ (dust)
Grenseverdier (Korttidsverdi) (mg/m ³)	0.3 mg/m ³ (value calculated-fume) 2 mg/m ³ (value calculated-dust)
Switzerland - Occupational Exposure Limits	
MAK (mg/m ³)	0.1 mg/m ³ (inhalable dust)
KZGW (mg/m ³)	0.2 mg/m ³ (inhalable dust)
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	0.2 mg/m ³ (fume)
Graphite (7782-42-5)	
Austria - Occupational Exposure Limits	
MAK (mg/m ³)	5 mg/m ³ (alveolar dust with <1% Quartz, respirable fraction)
MAK Short time value (mg/m ³)	10 mg/m ³ (alveolar dust with <1% Quartz, respirable fraction)
Belgium - Occupational Exposure Limits	
Limit value (mg/m ³)	2 mg/m ³ (except fibers-alveolar fraction)
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m ³)	5 mg/m ³ (inhalable fraction)



Graphite (7782-42-5)	
Croatia - Occupational Exposure Limits	
GVI (granična vrijednost izloženosti) (mg/m ³)	4 mg/m ³ (respirable dust) 10 mg/m ³ (total dust)
Czech Republic - Occupational Exposure Limits	
Expoziční limity (PEL) (mg/m ³)	2 mg/m ³ (dust)
Denmark - Occupational Exposure Limits	
Grænseværdie (langvarig) (mg/m ³)	2.5 mg/m ³ (natural-respirable)
Estonia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	5 mg/m ³ (total dust)
Finland - Occupational Exposure Limits	
HTP-arvo (8h) (mg/m ³)	2 mg/m ³
France - Occupational Exposure Limits	
VME (mg/m ³)	2 mg/m ³ (alveolar fraction)
Greece - Occupational Exposure Limits	
OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction) 5 mg/m ³ (respirable fraction)
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	2 mg/m ³ (all forms except fibres; respirable fraction)
OEL (15 min ref) (mg/m ³)	6 mg/m ³ (calculated-all forms except fibres; respirable fraction)
Latvia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	2 mg/m ³
Lithuania - Occupational Exposure Limits	
IPRV (mg/m ³)	5 mg/m ³ (dust)
Poland - Occupational Exposure Limits	
NDS (mg/m ³)	4 mg/m ³ (natural-inhalable fraction) 1 mg/m ³ (natural-respirable fraction)
Portugal - Occupational Exposure Limits	
OEL TWA (mg/m ³)	2 mg/m ³ (all forms except Graphite fibers-respirable fraction)



Graphite (7782-42-5)	
Romania - Occupational Exposure Limits	
OEL TWA (mg/m ³)	2 mg/m ³ (Quartz <=5%-dust, respirable fraction)
Spain - Occupational Exposure Limits	
VLA-ED (mg/m ³)	2 mg/m ³ (see UNE EN 481:1995 on workplace atmospheres-dust, respirable fraction)
United Kingdom - Occupational Exposure Limits	
WEL TWA (mg/m ³)	10 mg/m ³ (inhalable dust) 4 mg/m ³ (respirable dust)
WEL STEL (mg/m ³)	30 mg/m ³ (calculated-inhalable dust) 12 mg/m ³ (calculated-respirable dust)
Norway - Occupational Exposure Limits	
Grenseverdier (AN) (mg/m ³)	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)
Grenseverdier (Korttidsverdi) (mg/m ³)	10 mg/m ³ (natural-total dust) 4 mg/m ³ (natural-respirable dust) 15 mg/m ³ (synthetic-total dust) 8 mg/m ³ (synthetic-respirable dust)
Switzerland - Occupational Exposure Limits	
MAK (mg/m ³)	2.5 mg/m ³ (natural-respirable dust) 5 mg/m ³ (natural-inhalable dust)
USA - ACGIH - Occupational Exposure Limits	
ACGIH TWA (mg/m ³)	2 mg/m ³ (all forms except graphite fibers-respirable particulate matter)
Aluminum (7429-90-5)	
Austria - Occupational Exposure Limits	
MAK (mg/m ³)	10 mg/m ³ (inhalable fraction)
MAK Short time value (mg/m ³)	20 mg/m ³ (inhalable fraction)
Belgium - Occupational Exposure Limits	
Limit value (mg/m ³)	1 mg/m ³



Aluminum (7429-90-5)	
Bulgaria - Occupational Exposure Limits	
OEL TWA (mg/m ³)	10 mg/m ³ (metal dust) 1.5 mg/m ³ (respirable fraction)
Croatia - Occupational Exposure Limits	
GVI (granična vrijednost izloženosti) (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
Croatia - Biological limit values	
Croatia - BLV	200 mg/l Parameter: Aluminum - Medium: urine - Sampling time: at the end of the work shift
Czech Republic - Occupational Exposure Limits	
Expoziční limity (PEL) (mg/m ³)	10 mg/m ³ (dust)
Denmark - Occupational Exposure Limits	
Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³ (dust, fume and powder, total) 2 mg/m ³ (dust and powder, respirable)
Estonia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	10 mg/m ³ (total dust) 4 mg/m ³ (respirable dust)
France - Occupational Exposure Limits	
VME (mg/m ³)	10 mg/m ³ (metal) 5 mg/m ³ (dust)
Greece - Occupational Exposure Limits	
OEL TWA (mg/m ³)	10 mg/m ³ (inhalable fraction) 5 mg/m ³ (respirable fraction)
Hungary - Occupational Exposure Limits	
AK-érték	6 mg/m ³ (respirable dust)
Ireland - Occupational Exposure Limits	
OEL (8 hours ref) (mg/m ³)	1 mg/m ³ (respirable fraction)
OEL (15 min ref) (mg/m ³)	3 mg/m ³ (calculated-respirable dust)
Latvia - Occupational Exposure Limits	
OEL TWA (mg/m ³)	2 mg/m ³