



Safety Data Sheet

Report No. 20181128005

Version number 0	Issue Date 28-Nov-2018
Product name: WG384E Chain Saw	Revision date NA

1 SECTION1: Product and Company Identification

Product identifier

- Product name: WG384E Chain Saw

Relevant identified uses of the substance or mixture and uses advise against

Identified uses: Used for electric tools

Details of the supplier of the safety data sheet

Supplier: Positec Technology (China) Co., Ltd.

Address: No.18 Dongwang Road, Suzhou Industrial Park

Postcode: 215123

E-mail: Positec.sz@positec.biz

Tel: +86-512-65152888

Fax: +86-512-67631999

Emergency telephone number +86-512-65152888

2 SECTION 2:Hazards identification

GHS Classification

Not classified

Label elements

Symbols/Pictograms	None
Signal word	None
Hazard Statements	None
Precautionary Statements	
Prevention	None
Response	None
Storage	None
Disposal	None

Hazards not otherwise classified

No information available



Safety Data Sheet

Report No. 20181128005

Version number 0	
Product name: WG384E Chain Saw	

Issue Date 28-Nov-2018
Revision date NA

Unknown acute toxicity

No information available

3 SECTION 3:Composition/information on ingredients

Battery pack dangerous components.

Chemical Name	CAS Number	Material Composition
PA6+GF30	25038-54-4	36.93%
PVC	9002-86-2	0.22%
epoxy resin	61788-97-1	0.41%
Iron	7439-89-6	11.68%
Carbon	7440-44-0	9.64%
Copper	7440-50-8	9.64%
Lithium nickelate	12031-65-1	4.60%
Aluminium	7429-90-5	4.07%
Lithium manganese oxide	12057-17-9	2.76%
dimethyl carbonate	616-38-6	2.68%
Manganese	7439-96-5	2.40%
cobalt lithium dioxide	12190-79-3	1.84%
Polyethylene	9002-88-4	1.71%
Nickel	7440-02-0	2.87%
Oxygen	7782-44-7	1.40%
1,3-Dioxolan-2-one	96-49-1	1.10%
lithium hexafluorophosphate(1-)	21324-40-3	1.05%
Ethyl methyl carbonate	623-53-0	0.84%
Polypropylene	9003-07-04	0.65%
1-Propene homopolymer	9003-07-0	0.55%
Polyethylene terephthalate	25038-59-9	0.46%
Carbon black	1333-86-4	0.35%



Safety Data Sheet

Report No. 20181128005

Version number 0	Issue Date 28-Nov-2018
Product name: WG384E Chain Saw	Revision date NA

Polyvinylidene fluoride	24937-79-9	0.35%
lithium carbonate	554-13-2	0.29%
2-Propenoic acid polymer with butyl 2-propenoate, ethenyl acetate and 2-ethylhexyl 2-propenoate	35239-19-1	0.25%
4-Fluoro-1,3-dioxolan-2-one	114435-02-8	0.17%
Carboxyl Methyl Cellulose	9004-32-4	0.10%
Butanedinitrile	110-61-2	0.08%
Octadecylcarbamic acid ethenyl ester homopolymer	36671-85-9	0.06%
Styrene, butadiene copolymer	9003-55-8	0.06%
titanium dioxide	13463-67-7	0.06%
Talc (Mg ₃ H ₂ (SiO ₃) ₄)	14807-96-6	0.05%
2-Methyl-2-propenoic acid methyl ester polymer with 1,3-butadiene, ethenylbenzene and 2-propenenitrile	9010-94-0	0.05%
2-Methyl-2-propenoic acid polymer with 1,3-butadiene and ethenylbenzene	9010-93-9	0.05%
Fatty acids, coco polymers with benzoic acid, pentaerythritol and phthalic anhydride	68604-67-1	0.04%
poly(1,4-butylene terephthalate)	24968-12-5	0.03%
lithium tetrafluoroborate, anhydrous	14283-07-9	0.01%
2-Propenenitrile polymer with 1,3-butadiene and ethenylbenzene	9003-56-9	0.01%
1,3-Bis(2,4,6-trioxoperhydropyrimidin-5-ylidene)isoindoline	36888-99-0	0.01%
Magnesium	7439-95-4	0.00%
Silicon	7440-21-3	0.00%
Titanium	7440-32-6	0.00%
C.I. pigment blue 029	57455-37-5	0.00%
indium tin oxide	50926-11-9	0.00%
Rutile(TiO ₂)	1317-80-2	0.00%
C.I. pigment yellow 180	77804-81-0	0.00%
C.I. pigment blue 060	81-77-6	0.00%
Chromium	7440-47-3	0.00%
1,4-bis(dibromomethyl)benzene	1592-31-0	0.00%



Safety Data Sheet

Report No. 20181128005

Version number 0	Issue Date 28-Nov-2018
Product name: WG384E Chain Saw	Revision date NA

Phosphorus	7723-14-0	0.00%
3,5-Bis(1,1-dimethylethyl)-4-hydroxybenzenepropanoic acid 2,2-bis[[3-[3,5-bis(1,1-dimethylethyl)-4-hydroxyphenyl]-1-oxopropoxy]methyl]-1,3-propanediyl ester	6683-19-8	0.00%
Octadecanoic acid monoester with 1,2,3-propanetriol	31566-31-1	0.00%
Zinc	7440-66-6	0.00%
Vanadium	7440-62-2	0.00%
stannum	7440-31-5	0.27%
Argentine	7440-22-4	0.19%

4 SECTION 4: First aid measures

For the material leaked from battery interior

Eye contact: if contact, rinse with clean water for at least 15mins, turns upper and lower eyelid until the chemical residue gone, then go to see doctor immediately.

Skin contact: if contact, rinse with suds. Meanwhile take off the polluted clothes and shoes. If chemical burns or continual stimulates, please go to see a doctor immediately.

Eat: go to see a doctor immediately

Inhalation: remove him to the area that with the clean air immediately , provide him artificial respiration if can not breathe, don't use mouth-to-mouth breath method.

If has difficulty to breathe , given oxygen to overcome breathing problem. Go to see a doctor immediately.

5 SECTION 5: Fire fighting measures

Extinguishing media

Suitable extinguishing agents: CO₂, dry chemical powder, water spray.

Unsuitable extinguishing agents: No information available.



Safety Data Sheet

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Special hazards arising from the substance or mixture: Not flammable.

Advice for firefighters: Fire-fighters should wear appropriate breathing apparatus and protective equipment

6 SECTION 6: Accidental release measures

Personal precautions

Use personal protective clothing. Avoid contact with skin, eyes and clothing. Avoid breathing fume and gas.

Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

Methods for cleaning up/taking up

Take up mechanically and send for disposal.

7 SECTION 7: Handling and storage

Handling

Advice on safe handling

Avoid short circuiting the battery. Avoid mechanical damage of the battery. Do not open or disassemble.

Advice on protection against fire and explosion

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

Storage

Requirements for storage rooms and vessels

Storage at room temperature (approx. 20°C) at approx. 20-60% of the nominal capacity

Keep in closed original container..

8 SECTION 8: Exposure controls/personal protection



Safety Data Sheet

Report No. 20181128005

Version number 0	
Product name: WG384E Chain Saw	

Issue Date 28-Nov-2018
Revision date NA

Engineering Control: Select the appropriate ventilation and temperature control equipment, which should be equipped with eye cleaning and shower equipment. Use local equipment to ensure its concentration under the limitation.

Eye protection: Not necessary under normal use. Wear safety goggles or glasses with side shields if handling a leaking or ruptured battery.

Hand protection: Not necessary under normal use. Wear rubber gloves if handling a leaking or ruptured battery.

Skin protection: Not necessary under normal use. Wear protection suit in case of handling a leaking or ruptured battery

Respiratory protection: Not necessary under normal use. Keep the air circulation in case of handling a leaking or ruptured battery. Do not use it in a narrow place in this case.

9 SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties	
General Information:	
Appearance:	
Form:	Solid
Colour:	Coloured
Odour:	Odourless
pH-value:	Not applicable.
Melting point/Melting range:	Not applicable.
Boiling point/Boiling range:	Not applicable.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Product is not flammable.
Auto-Ignition temperature:	Not applicable.
Decomposition temperature:	Not applicable.
Self-igniting:	Product is not selfigniting.



Safety Data Sheet

Report No. 20181128005

Version number 0	
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Issue Date 28-Nov-2018
Revision date NA

• Danger of explosion:	Product does not present an explosion hazard.
• Flammable limits:	
Lower:	Not applicable.
Upper:	Not applicable.
• Oxidizing properties:	Not applicable.
• Vapour pressure:	Not applicable.
• Density:	Not determined.
• Evaporation rate:	Not applicable.
• Solubility in/Miscibility with:	
Water:	Not miscible or difficult to mix.
• Partition coefficient (n-octanol/water):	Not applicable.
• Viscosity:	
Dynamic:	Not applicable.

Kinematic: Not applicable.

Additional information No further relevant information available

10 SECTION 10: Stability and reactivity

Stability: It should be stable under the condition of normal storage and operation.

Conditions to avoid: Overheat; Exposure to humid conditions; Mechanical vibration

Taboo materials: strong oxidant

Hazardous decomposition products: Under the condition of burning may produce harmful decomposition products

Hazardous polymerization reaction: NA



Safety Data Sheet

Report No. 20181128005

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11 SECTION 11: Toxicological information

- **Acute toxicity:** No data available.
- **Skin corrosion/irritation:** No irritant effect.
- **Serious eye damage/irritation:** No irritating effect.
- **Respiratory or skin sensitization:** No sensitizing effects known.
- **Specific target organ system toxicity:** No information available.
- **Toxicokinetics, metabolism and distribution:** No information available.
- **Aspiration hazard:** No information available.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):** No information available.

12 SECTION 12: Ecological information

There are no ecological injuries under normal usage. Do not flush into water or sanitary sewer system

13 SECTION 13: Disposal considerations

Advice on disposal

For recycling consult manufacturer.

Disposal in accordance with local regulations

14 SECTION 14: Transport information

The lithium-ion battery packs are pack with an equipment are made in compliance to the requirements stated in the latest edition of the IATA Dangerous Goods Regulations Packing Instruction 966 section II (60th Edition, 2018), Section such that they can be transported as a NOT RESTRICTED (non-hazardous/non-dangerous) goods.

With regard to transport, the following regulations are cited and considered:

- The International Civil Aviation Organization (ICAO) Technical Instructions, Packing Instruction 966, Section II (60th Edition, 2018)



Safety Data Sheet

Report No. 20181128005

Version number 0	Issue Date 28-Nov-2018
Product name: WG384E Chain Saw	Revision date NA

- The International Air Transport Association (IATA) Dangerous Goods Regulations, Packing Instruction 966, Section II (60th Edition, 2018)
- The International Maritime Dangerous Goods (IMDG) Code(38th-16)
- US Hazardous Materials Regulations 49 CFR (Code of Federal Regulations) Sections 173-185 Lithium batteries and cells,
- The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria 38.3 Lithium batteries, , Rev.5, Amend.1

DOT

Proper Shipping Name	Not regulated
Hazard Class	Lithium ion battery
Emergency Response Guide	9
UN number	147

3481

Not regulated

MEX

Not regulated

ICAO (air)

Not regulated

IATA

Not regulated
The goods meet the requirement in General Requirements and section II of Packing

Instruction 966

Proper Shipping Name	Lithium ion battery
Hazard Class	9
UN number	3481

Not regulated

The article is not restricted to IMO IMDG Code according to Special Provision 188

Lithium ion battery

Proper Shipping Name	9
Hazard Class	F-A, S-I
EmS-No.	
UN number	3481

Not regulated

RID

Not regulated

ADR

Not regulated

ADN

Not regulated

Our products are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to all the applicable international and national



Safety Data Sheet

Report No. 20181128005	
Version number 0	Issue Date 28-Nov-2018
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governmental regulations, not limited to the above mentioned. We further certify that the enclosed products have been tested and fulfilled the requirements and conditions in accordance with UN Recommendations (T1 – T8) on the Transport of Dangerous Goods Model Regulations and the Manual of Testes and Criteria that can be treated as "Non-Dangerous Goods".



Safety Data Sheet

Report No. 20181128005

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Test results of the UN Recommendation on the Transport of Dangerous Goods Manual of Test and Criteria (38.3 Lithium battery)		Test Results	Remark
No .	Test item		
T1	Altitude Simulation	Pass	
T2	Thermal Test	Pass	
T3	Vibration	Pass	
T4	Shock	Pass	
T5	External Short Circuit	Pass	
T6	Impact	Pass	
T7	Overcharge	Pass	
T8	Forced Discharge	Pass	

15 SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance

USA or EU Regulation:

Authorizations : No information available.

Restrictions on use: No information available.

16 SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.



Safety Data Sheet

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Disclaimer

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Author	Reviewer	Approval
Boliang zhong 2018-11-28	Jennifer Chen 2018-11-28	Allen Ding 2018-11-28

——End of Safety Data Sheet——