SEALEY

Section 1. Product and Company Identification.

1.1 Model Number; CP2600BP v1

1.2 Description; Cordless Power Tool Battery 26V 3Ah Li-ion for CP2600

1.3 Manufacturer;

Sealey Group.
Kempson Way,
Bury St. Edmunds,
Suffolk.
IP32 7AR

1.4 Emergency telephone number; 44 (0) 1284 757 500

Date of source compilation; 16 January 2014

Section 2. Hazards Identification.

Invasion routes; eyes, skin contact, ingestion.

Health Hazard; Harmful if swallowed. Safe under normal conditions of use. Contents are non-reactive when the battery integrity and seals remain intact. DO NOT OPEN or DISMANTLE. DO NOT EXPOSE TO FIRE or NAKED FLAME. Burn / Explosion / Fire risks; do not mix with varying chemistries, sizes & types of battery. Do not crush or incinerate.

Environmental hazard; the internal electrolyte may cause adverse environmental impact. **Danger of fire and explosion;** risk is increased by high temperature and short circuit.

Section 3. Substances.

3.1 Chemical Name (substance)	3.1 CAS No.	3.2 Percentage of
		Content (mixture)
Nickel and cobalt lithium manganate		≤40
Graphite	7782-42-5	≤18
Copper	7440-50-8	≤10
Aluminium	7429-90-5	≤5
Super-P		≤1
Water adhesive LA133		0.5
Nickel	7440-02-0	0.5
Lithium Content	7439-93-2	0.135g/pcs
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Section 4. First aid measures.

Lithium Batteries do not pose a risk to eyes or skin under normal circumstances.

In the case of contact with internal substances;

EYE CONTACT: irrigate eyes with water for at least 15 minutes while raising eyelid(s).

Seek medical attention.

SKIN CONTACT: Remove contaminated clothing. Flush affected area(s) with copious amounts of water for at least 15

minutes. Seek medical attention.

INGESTION: If swallowed, do not induce vomiting. Give large amounts of water but *do not* do this is casualty is

unconscious.

INHALATION: If breathing difficulties develop, remove the person to fresh air.

Loosen close fitting clothing. Ensure that person is warm.

If breathing is difficult, give oxygen.

If mouth to mouth resuscitation is necessary, the person conducting this must takes steps to reduce

the risk of contamination from toxic / corrosive substances that may be present.

Protection of First Aiders:

Use personal protective equipment.

Avoid contact with skin, eyes and clothing.

Ensure that medical personnel are aware of the material(s) involved.

Ensure that medical personnel take precautions to protect themselves and prevent spread of

contamination.



Section 5. Fire Fighting Measures.

Recommended practice; if a battery becomes hot, immediately remove it from flammable materials and place on a non-combustible surface. If possible, place a disintegrating device outdoors and allow it to burn out.

Fire condition; NB; ensure that electrical devices are turned off. Prevent electric shock risk.

In case of fire where lithium batteries are present, flood the area with water. Important; read Section 5.1. If any batteries are burning, water may not extinguish them, but will cool the adjacent batteries and control the spread of fire.

5.1. Extinguishing media

Fragments may be ejected from a fire.

Extinguishers;

Only use Graphite based CO₂ (Carbon dioxide), Dry Powder or Foam.

Copper powder fire extinguishers, sand, dry ground dolomite or soda ash may also be used. These materials act as smothering agents.

If possible, use a **LITH-X (powdered graphite)** extinguisher on small fires. This material acts as a smothering agent. A **sodium chloride powder** extinguisher **IS NOT** suitable for use on Lithium Batteries.

It may not be possible to extinguish burning lithium batteries. Burning batteries will burn themselves out. Do not use water with **LITH-X** (powdered graphite).

• If a LITH-X (powdered graphite) extinguisher is not available;

Use copious amounts of water in a fine spray to swamp a fire.

Continue to use copious amounts of water until the fire is extinguished and the batteries are cooled.

NB: **Lithium reacts with water to form Hydrogen.** The fire will not be extinguished immediately. Be aware of the increased risk of explosion.

NB; fire-fighting water runoff may be corrosive / toxic and may cause adverse environmental impact.

5.2. Special hazards arising from the substance or mixture

Hazard characteristics; thermal decomposition can lead to the release of toxic fumes. **Hazardous combustion products;** carbon dioxide, carbon monoxide, lithium oxide fumes.

5.3. Advice for fire-fighters

Fire Fighters should wear self-contained breathing apparatus and appropriate Personal Protective Equipment.

Section 6. Accidental Release Measures.

In the event of battery rupture and leakage,

- ventilate the area.
- wear appropriate protective clothing (see Section 7) to prevent eye and skin contact and to prevent inhalation of vapours or fumes.
- remove sources of ignition.
- absorb released materials with inert absorbent (dry sand or soil).
- collect released materials into sealed plastic bag or container.

Prevent material from contaminating soil or entering sewers or waterways.

Do not dispose of released materials with domestic waste

Do not allow product to enter ground water, water course or sewerage system.

Dispose of released materials in accordance with local authority regulations.



Section 7. Handling and Storage.

Handling;

- 1. Never dismantle or modify a battery.
- 2. Do not immerse or expose a battery to water.
- 3. In the event of a battery becoming damaged and the battery contents are released, see section 8.
- 4. Do not short circuit a battery. A short circuit causes heating and can lead to ignition of surrounding materials. Physical contact with a short-circuited battery can cause skin burn. A short circuit will reduce the life of the battery.
- 5. To minimize the risk of a short circuit, always store batteries in an appropriate container to prevent contact with conductive materials.
- 6. Do not allow contact with water.
- 7. Do not remove the battery label.
- 8. Lithium batteries should be between 10% and 50% of full charge when being transported.
- 9. Batteries are designed to be recharged.

Improperly charging a battery may cause the battery to combust.

When charging the battery, use dedicated chargers and follow the specified conditions.

Batteries emit flammable gases during the charging process.

Ensure that the area is well ventilated and away from sources of ignition.

Do not eat, drink or smoke when handling batteries.

Storage;

- 1. Store battery (ies) away from heat, spark hazards, fire risk and open flames and other sources of ignition.
- 2. Store battery (ies) at room temperature (<30°C) and in a well ventilated and dry environment.
- 3. Do not store in direct sunlight.
- 4. Keep batteries away from children.
- 5. Do not eat, drink or smoke in battery storage area.



Section 8. Exposure Controls/Personal Protection.

Body protection;

Not necessary under conditions of normal use.

Use a protective rubber apron when handling a leaking or ruptured battery.

Use appropriate Personal Protection with long sleeves and long trousers.

Eye protection;

Not necessary under conditions of normal use.

Wear chemical grade full face shield should be worn if handling a leaking or ruptured battery.

Hand protection;

Not necessary under conditions of normal use.

Use chemical resistant, natural rubber or neoprene acid resistant gloves, with elbow length gauntlet, if handling a leaking or ruptured battery.

Respiratory protection;

Not necessary under conditions of normal use.

In case of a damaged battery, use acid gas filter mask or self-contained breathing apparatus.

Ventilation:

Not necessary under conditions of normal use.

In case of a damaged battery, provide adequate general and/or local exhaust ventilation to control airborne levels of battery gas and fumes.

Refer also to Section 4 and Section 5.

Section 9. Physical and Chemical Properties.

9.1. Information on basic physical and chemical properties

(a) Appearance: Solid, cylindrical.

(b) Odour: No odour.

No data available. (c) Odour threshold; (d) pH: No data available. No data available. (e) Melting point/freezing point; (f) Initial boiling point and boiling range; No data available. No data available. (g) Flash point; (h) Evaporation rate; No data available. (i) Flammability (solid, gas); No data available. No data available. (j) Upper/lower flammability or explosive limits; No data available. (k) Vapour pressure; (I) Vapour density; No data available. No data available. (m) Relative density; Not soluble in water. (n) Solubility(ies); (o) Partition coefficient: n-octanol/water; No data available.

(p) Auto-ignition temperature;(q) Decomposition temperature;No data available.

(r) Viscosity;No data available.(s) Explosive properties;No data available.(t) Oxidising properties.No data available.

Section 10. Stability and Reactivity.

10.1. Reactivity No data available.

10.2. Chemical stability Stable under normal use.

10.3. Possibility of hazardous reactions No data available.

10.4. Conditions to avoid Short circuit. Crushing.

Temperatures above 100°C will cause heat generation and

ignition.

Avoid direct sunlight and high humidity.

10.5. Incompatible materials Conductors, water, seawater, strong oxidisers, strong acids.

10.6. Hazardous decomposition products No data available.





Section 11. Toxicological Information.

Potential health risks;

Eye; Contact with battery contents may cause severe irritation and burns. Eye damage is possible.

Skin; Contact with battery contents may cause severe irritation and burns.

Absorption through the skin will cause localized inflammation.

Ingestion; may cause severe and permanent damage to the digestive tract. May cause circulatory system failure. Contents of an open battery can cause serious chemical burns to the mouth, oesophagus and gastrointestinal tract. **Inhalation**; Inhalation of vapours or fumes released due to heat or leaking batteries may cause respiratory irritation. Irritation may lead to chemical pneumonitis.

Inhalation can produce chronic productive cough and shortness of breath.

Information on contents.

Aluminium

- · Local effects: Aluminium itself has no toxicity. If aluminium enters a wound, dermatitis may be caused.
- · Chronic toxicity/Long term toxicity: By the long-term inhalation of coarse particulate or fume, it is possible to cause lung damage

Graphite

. Local affects: contact with eyes can cause discomfort.

The long-term inhalation of high levels of graphite coarse particulate may become a cause of a lung disease or a tracheal disease.

· Carcinogenicity: Graphite is not recognized as a cause of cancer by research organizations and natural toxic substance research organizations of cancer.

Copper

- · Acute toxicity: 60-100mg sized coarse particulate causes gastrointestinal disturbance with nausea and inflammation.
- · Local effects:

Coarse particulate affects the nose and a trachea.

Contact with eyes will cause reddening and discomfort.

· Sensitization: Sensitization of the skin may be caused by long-term or repetitive contact.



Section 12. Ecological Information.

- 1. When properly used and disposed of correctly, the battery does not present environmental hazard
- 2. Do not release internal components into water ways, wastewater or ground water.

Section 13. Disposal Considerations.

- 1. Disposal of the battery must be in accordance with local authority regulation requirements for hazardous waste treatment and hazardous waste transportation.
- 2. The battery should be completely discharged prior to disposal and the terminals taped or capped to prevent short circuit.
- 3. Do not dispose of batteries at landfill sites.
- 4. Do not incinerate batteries.



Section 14. Transport Information.

14.1. UN number UN 3480

14.2. UN proper shipping name ADR: Lithium ion Batteries

Class 9

Label 9
Packaging Instructions P903 P908 P909 LP903 LP904

Special provision 188 230 310 310 376 377 636

IATA: Lithium ion batteries

Class. 9

Hazard Label. Miscellaneous

Packaging Instructions Passenger & Cargo 965

Ltd Qty Forbidden

Cargo Only 965 ERG Code 9F

<u>IMDG</u>: Lithium metal batteries contained in equipment or

Lithium metal batteries packed with equipment

Class. 9
Packaging Instructions. P903

Properties and observations.

Electrical batteries containing lithium encased in a rigid metallic body. Lithium 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.

14.3. Transport hazard class(es) ADR 9

IATA

IMDG

14.4. Packing group ADR; II

IATA; II IMDG; II

14.5. Environmental hazards

14.6. Special precautions for user

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

IBC Code Instructions

Provisions

The battery must be securely packaged so as to prevent the possibility of short circuiting. All Lithium batteries are class 9, Miscellaneous Dangerous Goods.



Section 15. Regulatory Information.

Air; IATA DGR Packing Instructions 965 – 970.

ICAO Technical Instructions for the safe transport of dangerous goods by air.

Road (Europe); ADR special provision 188.

Sea (Ferry); IMDG code special provision 188.

Shipping name (UN Number)

Lithium metal batteries (including lithium alloy batteries) (UN3090)

Lithium-lon batteries contained in equipment (including lithium alloy batteries) (UN3091)

Lithium-ion batteries packed in equipment (including lithium alloy batteries) (UN3091)

IATA, ADR & IMDG

UN3090, packed in compliance with section 11 of PI968 UN3091, packed in compliance with section 11 of PI969 UN3091, packed in compliance with section 11 of PI970

Lithium-Ion batteries (including lithium polymer batteries) (UN3480)

Lithium-Ion batteries contained in equipment (including lithium polymer batteries) (UN3481)

Lithium-ion batteries packed in equipment (including lithium polymer batteries (UN3481)

IATA, ADR & IMDG

UN3480, packed in compliance with section 11 of PI965

UN3481, packed in compliance with section 11 of P1966

UN3481, packed in compliance with section 11 of PI1967

ADR & IMDG – packed in compliance with P908 refers to UN no's 3090, 3091, 3480, 3841 and not restricted under Special Provision 188

Hazardous Classification Class 9 (Miscellaneous)

Section 16. Additional Information.

The above information is believed to be accurate and represents the best information currently available.

No warranty is expressed or implied by the above information.

We assume no liability resulting from use of the above information.

The end user should conduct their own investigations to determine the suitability of the above information for their particular purpose.