

# Material Safety Data Sheet

<b>1. Chemical product and company identification</b>	
<b>Company name</b>	Teleco s.p.a.
<b>Company address</b>	Via E. Majorana 49, 48022 Lugo (Ra), Italy
<b>Manufacturer</b>	Teleco s.p.a.
<b>Manufacturer Address</b>	Via E. Majorana 49, 48022 Lugo (Ra), Italy
<b>Name of samples</b>	Portable Power Station
<b>Type / Model</b>	PPS 500
<b>Rated Energy</b>	460Wh
<b>Inspection according to</b>	EEC Directive 93/112/EC
<b>Emergency telephone call</b>	+39 0545 25037

<b>2. Composition Information</b>		
Material or ingredient	CAS No.	Wt %
Lithium Cobalt Oxide	12190-79-3	15-40
Graphite	7782-42-5	10-30
Phosphate (1-), hexafluoro-, lithium	21324-40-3	10-30
Copper	7440-50-8	7-13
Aluminium Foil	7440-44-0	5-10
Nickel	7440-02-0	1-5

<b>3. Hazard identification</b>	
<b>Explosive risk</b>	This article does not belong to the explosion dangerous goods.
<b>Flammable risk</b>	This article does not belong to the flammable material.
<b>Oxidation risk</b>	This article does not belong to the oxidation of dangerous goods.
<b>Toxic risk</b>	This article does not belong to the toxic dangerous goods.
<b>Radioactive risk</b>	This article does not belong to the radiation of dangerous goods.
<b>Mordant risk</b>	This article does not belong to the corrosion of dangerous goods.
<b>Other risk</b>	The batteries are not dangerous when used according to the instructions of manufacturer under normal conditions. In case of abuse, there's hazard of rupture, fire heat leakage of internal components which could cause casualty loss. Abuses including but not limited to the following cases: charged for long time, short circuited, put into fire, whacked with hard object, punctured with acute object, crushed, and broken



#### 4. First aid measures

**The lithium-ion batteries are not hazardous with eye and skin contact under normal circumstance. In case of internal hazardous substance leaking an hazardous substance, following measures should be taken if body parts contact with this substance:**

**After Skin Contact:** In case of contact, immediately wash skin with soap and copious amounts of water.

**After Eye Contact:** In case of contact, flush eyes with clean water for 15 minutes while lifting eyelids. Get prompt medical attention.

**After Inhalation:** If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**After Ingestion:** If swallowed, wash out mouth with water provided person is conscious. Call a physician.

#### 5. Fire-fighting measures

**Characteristics of Hazard:** Toxic fumes; gases or vapours may evolve on burning.

**Hazardous Combustion Products:** CO, CO<sub>2</sub>, HF, phosphorus fluoride.

**Fire-extinguishing Methods and Extinguishing Media:** Copious amounts of cold water are an effective extinguishing medium for lithium-ion batteries.

Don't use warm or hot water. Don't use Halon type extinguishing material. Dry powder, sand and earth might be used.

**Attention in Fire-extinguishing:** The Firemen should put on antigas masks and full fire-fighting suits.

#### 6. Accidental release measures

##### Steps to be taken in case Material is Released or Spilled

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. Wipe it up with a cloth, and dispose of it in a plastic bag and put into a steel can. The preferred response is to leave the area and allow the battery to cool and vapours to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapours. Remove spilled liquid with absorbent and incinerate.

##### Waste Disposal Method

It is recommended to discharge the battery to the end, to use up the metal lithium inside the battery, and to bury the discharged battery in soil.



## 7. Handling and storage

### Handling

The battery may explode or cause burns, if disassembled, crushed or exposed to fire or high temperatures. Do not short or install with incorrect polarity.

### Storage

Store in a cool, dry., well-ventilated area away from incompatible substances. Store locked up. Keep out of reach of children.

### Other Precautions

In case of rupture. Handle in accordance with good industrial Hygiene and safety practice. Avoid contact with skin, eyes or clothing. Use personal protection equipment.

## 8. Exposure controls/personal protection

### Engineering Controls

Use adequate ventilation to keep airborne concentrations low. If used under conditions that generate particulates, the ACGIH TLV-TWA of 3mg/m<sup>3</sup> respirable fraction (10mg/m<sup>3</sup> total) should be observed.

### Personal Protective Equipment

Eye and face protection: none required for consumer use. If there is a hazard of contact: Tight sealing safety goggles. Face protection shield.

Skin and body protection: None required for consumer use. If there is a hazard contact: Wear protective gloves and protective clothing.

Respiratory protection: No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

## 9. Physical and chemical properties

**Appearance:** Prismatic

**Colour:** Multi-colours

**Odours:** If leaking, smells of medical ether.

**pH:** Not applicable as supplied.

**Flash Point:** Not applicable unless individual components exposed.

**Flammability:** Not applicable unless individual components exposed.

**Relative density:** Not applicable unless individual components exposed.

**Solubility (water):** Not applicable unless individual components exposed.

**Solubility (other):** Not applicable unless individual components exposed.

## 10. Stability and reactivity

**Stability:** Stable under normal temperatures and pressures.

**Incompatibility:** oxidizing agents

**Conditions to Avoid:** Heat and open flame, short circuit, and water

**Hazardous polymerization:** Will not occur

**Decomposition Products:** CO, CO<sub>2</sub>, HF, phosphorus fluoride

## 11. Toxicological information

**Signs & symptoms:** None, unless battery ruptures.

In the event of exposure to internal contents, vapour fumes may be very irritating to the eyes and skin.

**Inhalation:** Lung irritant.

**Skin contact:** Skin irritant.

**Eye contact:** Eye irritant

**Ingestion:** Poisoning if swallowed. Medical conditions generally aggravated by exposure:

In the event of exposure to internal contents, moderate to severe irritation, burning and dryness of the skin may occur, Target Organs nerves, liver and kidneys.

## 12. Ecological information

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

**Mammalian effects:** None known at present.

**Eco-toxicity:** None known at present.

**Bioaccumulation potential:** Slowly Bio-degradable.

**Environmental fate:** None known environmental hazards at present.

## 13. Disposal consideration

**Waste Treatment:** Recycle or dispose of in accordance with government, state & local regulations.

**Attention for Waste Treatment:** Deserted batteries couldn't be treated as ordinary trash.

Couldn't be thrown into fire

or placed in high temperature. Couldn't be dissected, pierced, crushed or treated similarly.

The best way is recycling



## 14. Transport information

**UN No.** UN 3480

### Proper Shipping Name

Lithium-ion batteries (Including lithium-ion polymer batteries) or;  
Lithium-ion batteries contained in equipment (Including lithium-ion polymer batteries) or;  
Lithium-ion batteries packed with equipment (Including lithium-ion polymer batteries)

### Labels for Package

Class 9

<b>ICAO / IATA:</b>	Can be shipped by air in accordance with International Civil Aviation Organization (ICAO), TI or International Air Transport Association (IATA), DGR Packing Instructions (PI) 965 Section IA appropriate of IATA DGR 61st (2020 Edition) for transportation.
<b>IMDG CODE:</b>	«International Maritime Dangerous Goods» Code (IMDG Code 39-18).
<b>ADR:</b>	«European Agreement concerning the International Carriage of Dangerous Goods by Road» (ADR 2021).
<b>RID:</b>	«Regulations concerning the International Carriage of Dangerous Goods by Rail» (ADR 2021).

The dangerous goods regulations require that each battery design be subject to tests contained in Section 38.3 of the UN Manual of Tests and Criteria prior to being offered for transport.

## 15. Regulation information

### Regulatory information

«Dangerous Goods Regulations»  
«Recommendation on the Transport of Dangerous Goods Model Regulations»  
«Recommendation on the Transport of Dangerous Goods Manual of tests and Criteria»  
«International Air Transport Association» (IATA)  
«International Maritime Dangerous Goods»  
«Technical Instructions for the Safe Transport of Dangerous Goods»  
«Classification and code of dangerous Goods»  
«Occupational Safety and Health Act» (OSHA)  
«Toxic Substance Control Act» (TSCA)  
«Code of Federal regulations»

In according with all Federal, State and local laws.

## 16. Other information



**TELECO**  
T V A N T E N N A S

**TELECO** Spa

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Cap. Soc. € 120.000,00 int. vers.  
Reg. Imp. Ravenna, C.F. e P.IVA 01117060390  
R.E.A. di Ravenna N.121783  
N. meccanografico RA 004167  
VAT Registr. N. IT01117060390

This report is valid only for products that meet the following criteria :

Company : Teleco S.p.a.

Manufacturer: Teleco S.p.a.

Sample type & Mode: Portable Power Station PPS500.

The commissioner provides the composition information of batteries, and promises its integrity and accuracy. Users should read this file carefully, and use the batteries in correct method.

