Material Safety Data Sheet

1. Chemical product and company identification

1.1 Product Identification

Product Name: CS Free (Portable Battery Charger) Type/model: 2005 Electrical Rating: Battery Nominal Voltage: 11.1V Rated Capacity: 66Wh USB-A: 5V DC, 2.4A, 12W Max. USB-C: 5V DC, 9V DC, 12V DC, 15V DC, 20V DC, 3A, 60W Max. Charge Output: 14.4V DC, 20A, 240W Max. Charge Input: 10-25V DC, 5A, 60W Max. Weight: 1114.2 g

1.2 Company Identification

Company Name: CTEK Sweden AB Company Address: Rostugnsvägen 377670 Vikmanshyttan SWEDEN Telephone No.: +4622535180 Fax No.: +4625530793 Web: <u>www.ctek.com</u>

Emergency Telephone No.: +4622535180

2. Hazards identification

Health Harm:

The chemicals in this product are contained in a sealed can. Exposure to the contents will not occur unless the battery leaks, is exposed to high temperatures or is mechanically, physically, or electrically abused.

Eye Contact: Contact with battery contents may cause severe irritation.

Skin Contact: Contact with battery contents may cause irritation.

Inhalation: Inhalation of vapors or fumes released due to a large number of leaking batteries may cause respiratory and eye irritation. High concentration may cause central nervous system effects including headache, dizziness and nausea.

Ingestion: Swallowing is not anticipated due to battery size. Irritation to the internal/external mouth area, may occur following exposure to a leaking battery.

Environment Harm: not involved at normal use.

Explosion Danger: maybe be explosive at temperature more than 150 Deg C or expose to fire.

3. Composition/information on ingredients

Substance	Percentage of content	CAS No.
Lithium Cobalt Oxide	25%-35%	12190-79-3
Graphite	15%-20%	7782-42-5
Polyvinylidene Fluoride	1%-5%	24937-79-9
Acetylene Black	0.5%-3%	1333-86-4
Aluminum	21%-23%	7429-90-5
Copper	10%-11%	7440-50-8
Lithium hexafluorophosphate	10%-15%	21324-40-3

4. First-aid measures

Skin Contact: if the battery is leaking and the contained material contacts the skin, flush with copious amounts of clear water for at least 15 minutes.

Eye Contact: if the battery is leaking and the contained material contacts eyes, flush with copious amounts of clear water for at least 15 minutes. Get medical attention at once.

Inhalation: if the battery is leaking, remove to fresh air. If irritation persists, consult a physician.

Ingestion: if the battery is leaking and the contained material is ingested, rinse mouth and surrounding area with clear water at once. Consult a physician immediately for treatment.

5. Fire-fighting measures

Fire and Explosion Hazards: Batteries may burst and release hazardous decomposition particles when exposed to excessive heat, a fire situation, puncture, crush or abuse.

Extinguishing Media: Using dry chemical type extinguishers is the most effective means to extinguish a battery fire, carbon dioxide extinguishers will also work effectively.

Fire Fighting Procedures: Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing. During water application, caution is advised as burning pieces of flammable particles may be ejected from the fire.

6. Accidental release measures

The material contained within the battery would only be released under abusive conditions. In the event of battery rupture and leakage, collect all the released materials that are not hot or burning in appropriate waste disposal container while wearing proper protective clothing and ventilate the area. Placed in approved container and disposed according to the local regulations.

7. Handling and storage

Handling:

When used correctly, lithium-ion rechargeable batteries provide a safe and dependable source of portable power.

Misuse or abuse of batteries may result in leakage, burns, fire or explosion/disassembly causing personal injury or damage to other devices.

Do not disassemble the charging device. There are no user-serviceable parts inside. Incorrect assembly may result in shock or fire hazard.

Do not drop or subject the charging device to strong mechanical shock.

Do not expose the charging device to moisture, water, rain, snow or spray.

Do not insert any object into the parts or openings of the charging device.

Do not operate the charging device if it has received a sharp blow, been dropped, or otherwise has been damaged in any way.

Do not overcharge or short-circuit the battery.

Should a battery unintentionally be crushed, thus releasing its contents, rubber gloves must be used to handle components. Avoid the inhalation of any vapors emitted.

Storage:

Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler 3-protected structure with sufficient clearance between walls and battery stacks. Do not place batteries near heating equipment, nor expose to direct sunlight for long periods

Do not use or store in environments where the temperature is above 35°C or below -20°C. Battery exposure to temperature in excess of 60°C will result in the battery venting, flammable liquid and gases.

Keep batteries in original package until use and do not jumble them.

8. Exposure controls and personal protection

No substance is released from this product under normal and reasonably foreseeable conditions of use. Leaking, heat, fire or explosion may happen by abuse handling. Refer to section 4, 5 and 6 above for protection and handling measures in case leaking, heat, fire or explosion happens.

9. Physical and chemical properties

Refer to section 3

10. Stability and reactivity

Stability: This product is stable.

Incompatibility/Conditions to Avoid: Contents are incompatible with strong oxidizing agents and acids. Do not heat, crush, disassemble, or short circuit.

Hazardous Decomposition Products: The battery may release irritative gas once the electrolyte leaks

Hazardous Polymerization: None

11. Toxicological information

No toxicological properties at normal operation and handling. Electrolyte leakage caused by abuse handling releases irritative gas.

12. Ecological information

The battery does not contain mercury, cadmium or lead.

Do not let internal components enter marine environment. Avoid releasing to waterways, wastewater or ground water.

13. Disposal considerations

Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in Federal, State or Local requirements of hazardous waste treatment and hazardous waste transportation.

The battery should be completely discharged and/or the terminals should be insulated to prevent short-circuit prior to disposal.

The battery contains recyclable materials. Recycling options available in your local area should be considered when disposing of the product, through licensed carrier.

14. Transport information

PI965 of IATA DGR for air transportation.

SP188 of IMDG (inc Amdt 39-18) for sea transportation.

The batteries should be securely packed and protected against short-circuit. The package of the containers are integrate and tighten closed before transport. Prevent collapse of cargo piles. Do not put the goods together with oxidizer and chief food chemicals. Transport vehicles should prevent exposure to rain and high temperature. For road transport, no stopover in the residential and congested areas

Hazard Class: Class 9

Test method: UN38.3 and 1.2m drop test

UN No.: UN3480

UN Proper shipping name: Lithium Ion Batteries (Including Lithium Ion Batteries)

Marine pollutant: No

15. Regulatory information

Transportation regulation: refer to section 14

Battery directive 2006/66/ec, 2013/56/eu

REACH regulation (EC) No. 1907/2006

16. Other information

The design and assembly of this product including batteries require special skills, expertise and experience. Therefore, it is not recommended that the end user attempt to self-assemble this product.