

Material Safety Data Sheet

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : CMC
Part No : CMC_XXX
Brand : Electrodesandmore
Supplier : Battery Consulting
4020 Christopher way
Plano TX 75024
USA
Telephone : +1 877-394-3941
Fax : +1 208-955-4890
Emergency Phone # (For both supplier and
Manufacturer) : +1 972-636-1722
Preparation Information: Battery Consulting : +1 877-394-3941
Product Safety -

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Carcinogen, Target Organ Effect, Skin Sensitiser

Target Organs


Lungs, Nerves.

GHS Classification

Skin sensitization (Category 1)

Carcinogenicity (Category 2)

GHS Label elements, including precautionary statements

Pictogram 
Signal word Warning
Hazard statement(s)
H317 May cause an allergic skin reaction.
H351 Suspected of causing Cancer.
Precautionary statement(s)
P280 Wear protective gloves.

HMIS Classification

Health hazard : 2
Chronic Hazard *
Flammability : 0

Physical hazards : 0

NFPA Rating

Health hazard : 2

Fire : 0

Reactivity Hazard : 0

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.
Ingestion May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Styrene-Butadiene Rubber (SBR) binder for Li-ion Battery Anode

Component	Classification	Concentration
sodium carboxymethylcellulose; cellulose, carboxymethyl ether, sodium salt		

WARNING!

Static charges generated by emptying package in or near flammable vapors may cause flash fire.
May form flammable dust-air mixtures.
May cause mild eye irritation.
May cause skin irritation by mechanical abrasion.
Inhalation of dust may cause respiratory tract irritation.
Surfaces subject to spills may become slippery.

Repeated ingestion may cause an allergic reaction in susceptible individuals.
Repeated or prolonged skin contact may cause allergic dermatitis in susceptible individuals.
Refer to Section 5 for Hazardous Combustion Products, and Section 10 for Hazardous Decomposition/Hazardous Polymerization Products.

4. FIRST AID MEASURES

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a Physician.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for firefighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions. Nickel/Nickel Oxides, Lithium oxides, Manganese/manganese oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal..

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store under Inert gas.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workspace control parameters

Flash Point: > 300 °C

Lower Explosion Limit: N/A

Upper Explosion Limit: N/A

Fire Hazard: Flammable / Combustible under high heat and flame.

Can generate toxic and combustible fumes, - carbon monoxide, chlorinated and hydrocarbon compounds, and soot.

Fire Fighting Procedures: Use full protective equipment and SCBA, filter masks, etc.

Extinguishing Media: High expansion foam, water fog and spray.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemical. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form : Solid
Color : brown, black

Safety data

pH no available data
Melting point/freezing point Melting point/range: > 290 °C (> 554 °F)

Boiling point no data available

Flash point no data available

Ignition temperature no data available

Auto ignition Temperature no data available

Lower explosion limit no data available

Upper explosion limit no data available

Vapor pressure no data available

Density no data available

Water solubility no data available

Partition coefficient: n-octanol/water no data available

Relative vapor Density no data available

Odor no data available

Odor Threshold no data available

Evaporation rates no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

No Data Available

Materials to avoid

Oxidizing agents

Hazardous decomposition products

Other decomposition products: no data available.

Hazardous decomposition products formed under fire conditions : Nickel/nickel oxides, Lithium oxides, Manganese/manganese oxides

11. TOXICOLOGICAL INFORMATION**Acute toxicity**

Oral LD50 No data available

Inhalation LC50 No data available

Dermal LD50 No data available

Other information on acute toxicity No data available

Skin corrosion/irritation No data available

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No data available

Carcinogenicity

Limited evidence of carcinogenicity in human studies.

IARC: 2B - Group 2B: Possibly carcinogenic to humans (LITHIUM MANGANESE NICKEL OXIDE)
NTP: Reasonably anticipated to be a human carcinogen (LITHIUM MANGANESE NICKEL OXIDE)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity no data available

Teratogenicity no data available

Specific target organ toxicity - single exposure (Globally Harmonized System):

No data available.

Specific target organ toxicity - repeated exposure (Globally Harmonized System) no data available

Aspiration hazard no data available

Potential health effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.

Signs and Symptoms of Exposure

Large doses of lithium ion have caused dizziness and prostration, and can cause kidney damage if sodium intake is limited. Dehydration, weight loss, dermatological effects, and thyroid disturbances have been reported. Central nervous system effects that include slurred speech, blurred vision, sensory loss, ataxia, and convulsions may occur. Diarrhea, vomiting, and neuromuscular effects such as tremor, clonus, and hyperactive reflexes may occur as a result of repeated exposure to lithium ion., Men exposed to manganese dusts showed a decrease in fertility. Chronic manganese poisoning primarily involves the central nervous system. Early symptoms include languor, sleepiness and weakness in the legs. A stolid mask-like appearance of the face, emotional disturbances such as uncontrollable laughter and a spastic gait with tendency to fall in walking are findings in more advanced cases. High incidence of pneumonia has been found in workers exposed to the dust or fume of some manganese compounds.

Synergistic effects no data available

Additional Information RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity no data available

Persistence and degradability no data available

Bioaccumulative potential no data available

Mobility in soil no data available

PBT and vPvB assessment no data available

Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US) Not dangerous goods.

IMDG Not dangerous goods.

IATA Not dangerous goods.

15. REGULATORY INFORMATION

OSHA Hazards

Carcinogen, Target Organ Effect, Skin sensitiser

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

The following components are subject to reporting levels established by SARA Title III, Section 313:

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard.

Massachusetts Right To Know Components

Carboxymethyl Cellulose (CMC)

Pennsylvania Right To Know Components

Carboxymethyl Cellulose (CMC)

New Jersey Right To Know Components

Carboxymethyl Cellulose (CMC)

California Prop. 65 Components

WARNING! This product contains a chemical known to the State of California to cause cancer.

Carboxymethyl Cellulose (CMC)

16. OTHER INFORMATION

Text of H-code(s) and R-phrase(s) mentioned in Section 3

Further information

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The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Battery Consulting and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.electrodesandmore.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.
