

- Sensitization : The nervous system of respiratory organs may be stimulated sensitively.
- Chronic toxicity/Long term toxicity: By the inhalation of coarse particulate of Manganese Oxide (MnO₂), lungs and a nervous system may be affected and bronchitis, pneumonia, a nerve disease, and nerve mental disorder (manganese poisoning) may be produced.
- * Carcinogenicity : Nickel and Nickel compound are carcinogenic to humans(group 1 : IARC).
Cobalt and cobalt compounds are considered to be possible human carcinogen(group 2B : IARC).

Aluminum

- Health Rating:0 - None
- Flammability Rating:1 - Slight
- Reactivity Rating:1 - Slight
- Contact Rating:0 - None
- Local effects: Aluminum itself has no toxicity.

Graphite

- Health Rating:0 - None
- Flammability Rating:0 - None
- Reactivity Rating:0 - None
- Contact Rating:1 - Slight
- Acute toxicity: Not available.
- Local effects: When it goes into one's eyes, it stimulates one's eyes; conjunctivitis, thickening of corneal epithelium or edematous inflammation palpebra may be caused.
- Chronic toxicity/Long term toxicity: Since the long-term inhalation of high levels of graphite coarse particulate may become a cause of a lung disease or a tracheal disease, it is regulated by the coarse particulate obstacle prevention rule and the dust-lung method enforcement regulations.
- Carcinogenicity: Graphite is not recognized as a cause of cancer by research organizations and natural toxic substance research organizations of cancer.

Copper

- Health Rating:3 - Severe (Life)
- Flammability Rating:1 - Slight
- Reactivity Rating:2 - Moderate
- Contact Rating:1 - Slight
- Acute toxicity:
60-100mg sized coarse particulate causes a gastrointestinal disturbance with nausea and inflammation.
TDLo, hypodermic - Rabbit 375mg/kg
- Local effects:
Coarse particulate stimulates a nose and a tracheal.
When it goes into one's eyes, the symptom of the reddening and the pain is caused.
- Sensitization: Sensitization of the skin may be caused by long-term or repetitive contact.
- Reproductive toxicity: TDLo, oral - Rat 152mg/kg

Organic electrolyte

- Acute toxicity: LD₅₀, oral - Rat 2,000mg/kg or more
- Local effects: There is irritating to eye and skin.
- Skin irritation study: 3 – Severe.
- Eye irritation study: 3 – Severe.

12.ECOLOGICAL INFORMATION

- * Persistence/degradability: Since a battery cell and the internal materials remain in the environment, do not bury or throw out into the environment.
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