MSDS
Material Safety Date Sheet

Activated Carbon

1. Product Identification

Synonyms: Activated Carbon
CAS No.: 64365-11-3
Molecular Weight: 12.01
Product Codes:
Company Name: HANDOK CARBON Co.,Ltd.
Telephone: 031-355-2600
Fax: 031-355-2602

2. Composition/Information on Ingredients

Ingredient	Common Name	CAS No	Percent	Hazardous
Carbon	Activated Carbon	64365-11-3	80% Min	No
Moisture	Water	7732-18-5	20% Max	No

3. Hazards Identification

Emergency Overview

CAUTION! ACTIVATED CARBON AFFECTS THE RESPIRATORY AND CARDIOVASCULAR SYSTEMS.

Potential Health Effects

Inhalation:

No adverse effects expected. The dust may cause mild irritation to the respiratory tract.

Ingestion:

No toxic effects expected. May cause mild irriation to the gastrointestinal tract.

Skin Contact:

Not expected to be a health hazard from skin exposure. May cause mild irritation and redness.

Eye Contact:

No adverse effects expected. May cause physical irritation, possible reddening if no removed.

Chronic Exposure:

Prolonged inhalation of excessive dust may produce pulmonary disorders.

Aggravation of Pre-existing Conditions:

No information found.

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4. First Aid Measures

Inhalation:

Remove to fresh air. Get medical attention if ill effects occur.

Ingestion:

If swallowed, do not induce vomiting, give several glasses of water or milk to drink. If large amounts were swallowed or symptoms occur, get medical advice. Never give anything by mouth to an unconscious person.

Skin Contact:

Wash the affected area with soap and water.

Eye Contact:

Immediately flush eyes with plenty of water for at least 15minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

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5. Fire Fighting Measures

Fire:

Activated carbon is difficult to ignite if fire is possible at elevated temperatures or by contact with an ignition source and tends to burn slowly (smolder) without producing smoke or flame. Wet activated carbon depletes oxygen from the air. Materials allowed to smolder for long periods in enclosed spaces, may produce amounts of carbon monoxide which may reach the lower explosive limit for carbon monoxide of 12.5% in air. Contact with strong oxidizers such as ozone or liquid oxygen may cause rapid combustion. Mixing with strong oxidizers such as organic peroxide, chlorate or chlorite may cause combustion or explosion.

Explosion:

Minimum explosible concentration of activated carbon in fine dust is 0.140 g/l.

Fire Extinguishing Media:

Water spray, dry chemical, alcohol foam, or carbon dioxide.

Special Information:

In the event of a fire, wear full protective clothing and approved self-contained breathing

apparatus, if fumes are being entered.

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6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8.

Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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7. Handling and Storage

Storage:

Keep in a tightly closed container, not be stored in direct sunlight, stored in a cool, dry, ventilated area. Protect against physical damage and moisture. Isolate from any source of heat or ignition. Separate from incompatibles and oxidizers.

Castoff handling:

Containers of this material may be hazardous when empty since they retain product residues(dust. solids); observe all warnings and precautions listed for the product.

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8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Ventilation System:b

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Respirators:

For conditions of use where exposure to dust or mist is apparent and engineering controls are not feasible, a particulate respirators(better filters) may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection:

Wear protective gloves and clean body-covering clothing.

Eye Protection:

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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9. Physical and Chemical Properties

Appearance:

Black granules.

Odor:

Odorless.

Solubility:

Insoluble in water.

Bulk Density:

Normally between 450 and 550kg/㎥.

pH:

9~11

% Volatiles by volume @21C(70F):

No information found.

Boiling Point:

No information found.

Melting Point:

3586℃.

Decomposition Temperature:

No information found.

Flash Point (closed cup) :

No information found.

Explosion Limit:

0.140 g/L(The suspended concentration in air of activated carbon in fine dust).

Vapor Density(Air=1):

No information found.

Vapor Pressure(mm Hg):

No information found.

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10. Stability and Reactivity

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Involvement in a fire causes formation of carbon dioxide and carbon monoxide.

Hazardous Polymerization:

Will not occur.

Incompatibilities:

Strong oxidizers such as ozone, liquid oxygen, chlorine, permanganate, etc. may result in rapid combustion.

Conditions to Avoid:

Moisture and incompatibles.

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11. Toxicological Information

The acute oral LD50(Rat) is>10g/kg.

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12. Ecological Information

Environmental Fate:

No information found.

Environmental Toxicity:

No information found.

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13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility.

Dispose of container and unused contents in accordance with nation and local requirements.

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14. Transport Information

Sea(IMDGC): Handling and storage according to common goods.

Proper Shipping Name: ACTIVATEDCARBON (made of coal, granule)

Packing Group: Package according to common goods.

Additive Information: Activated carbon usually belongs to autoignition materials, Hazard Class:4.2; UN No.; 1362. But according to IMDGC, if the material passes the autothermal test regulated in "Recommenda-tion on the Transport of Dangerous Goods, Manual of Test and Criterial 33.3.1.3.3", it can be escapable on classification and code of Dangerous Goods. This kind of activated carbon has no autothermal reaction by above test, so it does not belong to autoignition materials(Class 4.2). Activated carbon made of wood and the one in fine dust made of coal does not siut for this MSDS.

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15. Regulatory Information

WHMIS:

This MSDS has been prepared according to GB / T 175191.1 - 1998 "Safety data sheet for chemical

products- Part 1: Content and order of sections"(PRC) and refer to the information required in IMDGC.

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16. Other Information

Product Use:

No information.

Revision Information:

Revision Date : Novembor 10. 2016

Issue Date:

October 5. 2013

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Label Hazard Warning:

CAUTION! MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. MAY BE HARMFUL IF SWALLOWED OR INHALED.

Label Precautions:

Avoid contact with eyes, skin and clothing.

Wash thoroughly after handling.

Avoid breathing dust.

Keep container closed.

Use with adequate ventilation.

Label First Aid:

If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists. If swallowed, give several glasses of water to drink to dilute. If large amounts were swallowed or symptoms occur, get medical advice. Never give anything by mouth to an unconscios person.

Disclaimer:

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