



NEWAY SINOPHC TECH. LIMITED

ADD:RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI) PILOT FREE TRADE ZONE.
Email:marketing01@newayphc.com; Phone:+86-021-50350029 <https://www.newayphc.com>

Safety Data Sheet (MSDS)

(According to GB/T 16483 and GB/T 17519; Adapts to GHS, IMDG, IATA Standards)

Activated Carbon (Powdered/Granular)

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product Identifiers

- Product Name: Activated Carbon
- Product Number: AC-CAS7440440-202601
- Brand: SIGALD
- CAS-No.: 7440-44-0
- Synonyms: Activated Charcoal; Activated Carbon Black
- Chemical Family: Carbonaceous Adsorbent (Natural/Artificial)

1.2 Details of the supplier of the safety data sheet

- Company : NEWAY SINOPHC TECH. LIMITED
- RM. 204, BUILDING 3, NO. 188, AONA RD., CHINA (SHANGHAI)PILOT FREE TRADE ZONE.
- Telephone : +86-021-50350029
- Fax : +86-021-50350029

1.3 Emergency telephone

Emergency Phone # : +86-021-50350029
(CHEMTREC)

1.4 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

- Identified Uses: Water purification (adsorbent for organic pollutants, heavy metals); air purification (odor removal, volatile organic compound (VOC) adsorption); industrial 脱色 (dyes, chemicals); food processing (decolorization, deodorization); medical detoxification (oral antidote for poisoning).
- Uses Advised Against: Not for pharmaceutical injection; not for direct oral consumption without medical guidance.

SECTION 2: Hazards Identification

Summary of Emergency Measures: Black powder/granular solid. Non-hazardous. After inhalation: Move to fresh air if discomfort occurs. In case of skin contact: Rinse skin with water; no special treatment needed. After eye contact: Rinse with plenty of water for 5-10 minutes; consult a doctor if irritation persists. After swallowing: Rinse mouth with water; do not induce vomiting; consult a doctor if feeling unwell. Non-combustible. No risk of explosion.

2.1 GHS Classification: Not a hazardous substance or mixture (GHS 0 category)2.2 GHS Label Elements

- Hazard Pictogram: None
- Signal Word: None
- Hazard Statements: None
- Precautionary Statements: None



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2.3 Physical and Chemical Hazards: No physical or chemical hazards; dust may cause slight respiratory irritation if inhaled in large quantities.2.4 Health Hazards: No acute or chronic health hazards; mild eye irritation may occur in sensitive individuals from dust.2.5 Environmental Hazards: Environmentally friendly; inert in natural environments; no adverse effects on aquatic organisms.2.6 Other Hazards: No additional hazards identified.

SECTION 3: Composition/Information on Ingredients

- Substance / Mixture: Mixture (Carbonaceous Matrix)

3.1 Main Components	Content (w/w)	CAS-No.
Elemental Carbon	≥ 90.0%	7440-44-0
Inorganic Ash (Silica, Alumina)	≤ 8.0%	N/A
Moisture	≤ 10.0%	7732-18-5

Hazardous Ingredients: None

SECTION 4: First Aid Measures

4.1 Description of First-Aid Measures

- If Inhaled: Move victim to fresh air. No special treatment required if no discomfort; wear a dust mask if exposed to large amounts of dust. Consult a doctor if coughing or chest tightness persists.
- In Case of Skin Contact: Rinse skin with running water for 5 minutes. Remove contaminated clothing; wash clothing before reuse.
- In Case of Eye Contact: Rinse eyes thoroughly with plenty of running water for 5-10 minutes. Remove contact lenses if present. Consult a doctor if irritation occurs.
- If Swallowed: Rinse mouth with water. Do not induce vomiting. Consult a doctor if gastrointestinal discomfort occurs.

4.2 Most Important Symptoms and Effects, Both Acute and Delayed

- Acute Effects: Mild eye irritation from dust in sensitive individuals; no other acute toxic effects.
- Delayed Effects: No known delayed toxic effects based on current data.

4.3 Indication of Any Immediate Medical Attention and Special Treatment Needed: No specific medical treatment required; treat symptomatically if needed.

4.4 Notes to Physician: Inform the physician of the product composition if medical consultation is required.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media

- Suitable Extinguishing Media: Water spray, foam, carbon dioxide (CO₂), dry powder.
- Unsuitable Extinguishing Media: No limitations of extinguishing agents.

5.2 Special Hazards Arising from the Substance or Mixture

- Non-combustible; no hazardous combustion gases generated (carbon dioxide and water vapor if burned in excess oxygen).
- Dust cloud may cause slight explosion risk in confined spaces with high concentration (unlikely under normal use).



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5.3 Advice for Firefighters

- No special protective equipment required; wear standard fire-fighting gear.
- Cool storage containers with water spray from a safe distance if involved in fire.

SECTION 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

- Wear dust mask (FFP1), nitrile rubber gloves, and safety glasses when handling spills to avoid dust inhalation or eye contact.
- Evacuate non-essential personnel if large spills occur; ensure good ventilation to disperse dust.

6.2 Environmental Precautions

- Prevent spilled material from entering sewers, rivers, or groundwater systems (inert, no pollution risk, but may cause blockage).

6.3 Methods and Materials for Containment and Cleaning Up

- Small Spill: Sweep into sealed containers for reuse or disposal. Use damp cloth to wipe dust to avoid dispersion.
- Large Spill: Contain with dikes; transfer to sealed containers using dust-free equipment. Dispose of via licensed waste treatment facilities.

6.4 Reference to Other Sections: For disposal, see Section 13.

SECTION 7: Handling and Storage

7.1 Precautions for Safe Handling

- Operate in a well-ventilated area; use local exhaust ventilation to avoid dust accumulation.
- Avoid generating dust during handling; use damp methods (e.g., misting) to suppress dust if necessary.
- Hygiene Measures: Wash hands thoroughly with soap and water after handling; do not eat, drink, or smoke in the workplace to avoid ingesting dust.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

- Storage Conditions: Store in a cool, dry, well-ventilated warehouse. Keep container tightly closed. Avoid moisture and direct sunlight (moisture reduces adsorption efficiency).
- Incompatibilities: Strong oxidizing agents (e.g., hydrogen peroxide, potassium permanganate) – may react slowly at high temperatures.
- Storage Class (TRGS 510): 13 (Non-Hazardous Solids)
- Shelf Life: 24 months (unopened, under specified storage conditions; adsorption capacity may decrease over time if exposed to moisture or pollutants).

SECTION 8: Exposure Controls/Personal Protection

8.1 Control Parameters

Component	CAS-No.	Value	Control Parameters	Basis
Activated Carbon	7440-44-0	No occupational exposure limits	TWA (Time-Weighted Average)	No relevant national/international exposure standards

8.2 Exposure Controls

- Engineering Controls: Install local exhaust ventilation for dust-generating processes; ensure basic ventilation for general handling.
- Personal Protective Equipment (PPE):
 - Eye/Face Protection: Safety glasses with side shields recommended for large-scale handling.
 - Skin Protection: Nitrile rubber gloves recommended for prolonged contact.
 - Respiratory Protection: Dust mask (FFP1) when exposed to dust; FFP2 mask for high dust concentrations.
- Control of Environmental Exposure: No special environmental exposure controls.

SECTION 9: Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

- a) Physical State: Solid (powder/granular)
- b) Color: Black
- c) Odor: Odorless
- d) Melting Point/Freezing Point: Decomposes above 300°C (no fixed melting point)
- e) Initial Boiling Point and Boiling Range: Not applicable (decomposes)
- f) Flammability (Solid): Non-flammable
- g) Upper/Lower Flammability or Explosive Limits: Not applicable
- h) Flash Point: Not applicable
- i) Autoignition Temperature: > 400°C
- j) Decomposition Temperature: > 300°C (carbonization, no hazardous decomposition)
- k) pH Value (1% Aqueous Suspension, 25°C): 6.0-9.0
- l) Viscosity: Not applicable (solid)
- m) Water Solubility: Insoluble in water and most organic solvents
- n) Partition Coefficient (n-octanol/water): No data available
- o) Vapor Pressure (25°C): < 0.1 hPa
- p) Density (25°C): 1.8-2.1 g/cm³ (bulk density: 0.4-0.8 g/cm³)
- q) Relative Vapor Density: No data available
- r) Particle Characteristics: 20-100 mesh (granular); 200-400 mesh (powdered)
- s) Explosive Properties: Not explosive
- t) Oxidizing Properties: None

9.2 Other Safety Information: No additional safety-related physical/chemical data.

SECTION 10: Stability and Reactivity

10.1 Chemical Stability: Stable under recommended storage conditions (dry, sealed, away from oxidizing agents). 10.2 Possibility of Hazardous Reactions: No hazardous reactions under normal use conditions. 10.3 Conditions to Avoid: High temperature (> 300°C), moisture, contact with strong oxidizing agents. 10.4 Incompatible Materials: Strong oxidizing agents, concentrated acids (minor reaction at high concentrations). 10.5 Hazardous Decomposition Products: No hazardous decomposition products; decomposes to carbon dioxide and water vapor when burned in air.

SECTION 11: Toxicological Information

11.1 Information on Toxicological Effects

- Acute Toxicity:
 - Oral (Rat, LD₅₀): > 10,000 mg/kg
 - Dermal (Rabbit, LD₅₀): > 10,000 mg/kg
 - Inhalation (Rat, LC₅₀): > 50 mg/m³ (4-hour exposure to dust)
- Skin Corrosion/Irritation: No irritation (Rabbit, 4-hour exposure).
- Serious Eye Damage/Eye Irritation: Mild irritation (Rabbit, 24-hour exposure to dust; reversible).
- Respiratory or Skin Sensitization: No sensitizing effects.
- Germ Cell Mutagenicity: No data available.
- Carcinogenicity: Not classified as carcinogenic by IARC, EPA, or NTP.
- Reproductive Toxicity: No data available.
- Specific Target Organ Toxicity (Single/Repeated Exposure): No target organ toxicity.

11.2 Additional Information: The toxicological properties have been sufficiently studied for safe industrial and daily use.

SECTION 12: Ecological Information

12.1 Toxicity:

- Fish (Zebrafish, LC₅₀): > 5000 mg/L (96-hour exposure)
 - Daphnia (EC₅₀): > 1000 mg/L (48-hour exposure)
 - Algae (EC₅₀): > 5000 mg/L (72-hour exposure)
- 12.2 Persistence and Degradability: Inert in natural environments; does not biodegrade but does not accumulate or cause pollution.
- 12.3 Bioaccumulative Potential: No bioaccumulation potential.
- 12.4 Mobility in Soil: Low mobility; binds to soil particles.
- 12.5 Results of PBT and vPvB Assessment: Not classified as PBT/vPvB.
- 12.6 Endocrine Disrupting Properties: No data available.
- 12.7 Other Adverse Effects: No known adverse ecological impacts; aids in environmental purification via adsorption.

SECTION 13: Disposal Considerations

13.1 Waste Treatment Methods

- Product Waste: Classified as non-hazardous waste. Dispose of through licensed waste treatment facilities in accordance with local, national, and international regulations. Spent activated carbon (after adsorption) may be incinerated for energy recovery or landfilled.
- Packaging Waste: Rinse packaging thoroughly with water to remove residual product; dispose of as non-hazardous waste or recycle.

SECTION 14: Transport Information

14.1 UN Number: ADR/RID: -; IMDG: -; IATA-DGR: -

14.2 UN Proper Shipping Name: ADR/RID: Not dangerous goods; IMDG: Not dangerous goods; IATA-DGR: Not dangerous goods

14.3 Transport Hazard Class(es): ADR/RID: -; IMDG: -; IATA-DGR: -

14.4 Packaging Group: ADR/RID: -; IMDG: -; IATA-DGR: -

14.5 Environmental Hazards: ADR/RID: No; IMDG Marine Pollutant: No; IATA-DGR: No

14.6 Special Precautions for User: Transport in sealed containers to prevent dust

dispersion and moisture absorption. Avoid collision and physical damage during transport.14.7

Incompatible Materials: Avoid transport with strong oxidizing agents.

Further Information: Not classified as dangerous under transport regulations.

SECTION 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations/Legislation Specific for the Substance or Mixture

- National Regulations (China):
 - Hazardous Chemical Safety Management Regulation (Non-hazardous classification)
 - Environmental Protection Law
 - Water Pollution Prevention and Control Law
- International Regulations:
 - GHS Classification (Rev. 9): Non-hazardous
 - REACH (EU): Not listed in SVHC Candidate List
 - TSCA (US): Listed on the TSCA Inventory (CAS 7440-44-0)
 - FDA (US): Approved for food contact and medical detoxification use

15.2 Other Regulations: Comply with local waste disposal and environmental protection regulations; food-grade activated carbon must meet FDA 21 CFR or EU Food Contact Materials standards.

SECTION 16: Other Information

- Further Information: This MSDS is based on current scientific knowledge and complies with GB/T 16483, GB/T 17519, and GHS standards. It is intended for safe handling, storage, transport, and disposal. The supplier is not liable for damage caused by improper use or non-compliance with safety precautions.
- Revision Date: 20 JAN 2026