MATERIAL SAFETY DATA SHEET (MSDS)

THIS MSDS IS AUTHORING BASED ON THE DATA SUPPLIED BY AND IDENTIFIED ON BEHALF OF THE CLIENT.

SAMPLE NAME: SINTERED ACTIVATED CARBON ROD

CLIENT NAME: NINGBO HO WATER PURIFICATION TECHNOLOGY CO., LTD.

CLIENT ADDRESS: NO. 221, ZHENGTONG ROAD, KANDUN STREET, CIXI, ZHEJIANG, CHINA

MSDS NO.: ZKGX20181226-02-01-001

ISSUING DATE: DEC.29,2018

SIGNED FOR AND ON BEHALF OF BEIJING ZKGX RESEARCH INSTITUTE OF CHEMICAL TECHNOLOGY

APPROVED SIGNATORY:

Material Safety Data Sheet

Section 1	Identification	Section 9	Physical and chemical properties
Section 2	Composition/information on ingredients	Section 10	Stability and reactivity
Section 3	Hazard identification	Section 11	Toxicological information
Section 4	First-aid Measures	Section 12	Ecological information
Section 5	Fire-fighting measures	Section 13	Disposal considerations
Section 6	Accidental release measures	Section 14	Transport information
Section 7	Handling and storage	Section 15	Regulatory information
Section 8	Exposure controls/personal protection	Section 16	Other information

Section 1: Identification

Product name: Sintered activated carbon rod
Product No.: ZKGX20181226-02-01-001
Telephone: 0574-63002304
Company: Ningbo HO Water Purification Technology Co., Ltd.
Address: No. 221, Zhengtong Road, Kandun Street, Cixi, Zhejiang, China

Section 2: Composition/Information On Ingredients

Substance √Mixture

Chemical name	Concentration (%)	CAS No.
Activated carbon	50	7440-44-0
Ultra-high molecular weight polyethylene	50	95268-62-5

Section 3 : Hazard Identification

Classification of the substance or mixture: This product is not included in the List of Hazardous Chemicals (2002 edition).

GHS label elements, including precautionary statements: No hazardous label elements.

Healthy hazards: There is no special health hazard in normal use.

Explosion danger: Exposure to open flames has slight combustibility.

Environmental hazards: No data available

Section 4 : First-aid Measures

Skin contact: Rinse with clear water.

Eyes contact: Separate eyelids and rinse with flowing clear water or normal saline. See a doctor immediately.

Inhalation: Quickly leave the site to the fresh air. If you have cough or breathing discomfort, see a doctor in time.

Ingestion: Rinse your mouth with clear water.

Section 5: Fire-fighting Measures

Extinguishing media: Extinguish fire with water mist, dry powder, foam or carbon dioxide extinguishing agent.

Advice for firefighters：	Fire fighters must wear full-length fire and gas protective clothing to fight the fire on the upwind.Move the container from the fire field to the open area whenever possible.If the container in the fire scene has changed color, it should be handled in time.
Further information：	Isolate the scene of the accident and prohibit irrelevant personnel from entering. Hold and handle fire water to prevent environmental pollution. Avoid using direct current water to extinguish fires. Direct current water may cause splashing of combustible solids and spread the fire.

Section 6： Accidental Release Measures

Emergency handling:	Isolate contaminated areas and restrict access.Cut off the fire. It is recommended that emergency personnel wear dust masks (full covers) and general work clothes. Collect with a clean shovel in a dry, clean, covered container and transfer to a safe place. If there is any leakage, clean the leakage to prevent carbon dust from mixing into the air. If there is a large amount of leakage, collect and recycle it or transport it to the waste disposal site for disposal.
Human-related security measures:	Avoid generating and inhaling dust. When the dust concentration is too high, emergency personnel must wear safety protection equipment to enter the site.
Environmental protection measures:	The collected unused ones can be put into relevant containers and treated as non-hazardous wastes. Dispose of collected used products according to relevant regulations.

Section 7： Handling and Storage

Operational considerations:	Avoid dust generation. Operators should be specially trained and strictly abide by the operating rules. Keep away from kindling and heat sources. Smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. Avoid contact with banned substances such as oxidants (see Section 10 for banned substances). Lightly unload when handling to prevent damage to packaging and containers. Equipped with the corresponding variety and quantity of fire fighting equipment and leakage emergency treatment equipment.
Storage considerations:	Store in a dry, ventilated warehouse.Avoid contact with banned substances such as oxidants (see Section 10 for banned substances). Keep the container sealed.Stay away from fire and heat. Lightning protection equipment must be installed in the warehouse.The air exhaust system shall be equipped with grounding device for conducting and removing static electricity.Use explosion-proof lighting and ventilation settings. It is forbidden to use equipment and tools that can easily generate sparks.

Section 8： Exposure Controls/Personal Protection

Control parameters:	/
Appropriate engineering controls:	Closed operation, partial ventilation Provide safe shower and eyewash equipment.
Respiratory system protection:	When the concentration of dust generated in the air is too high, it is recommended to wear a filter dust respirator.
Eye/face protection:	Normal operation without special protection.
Skin protection:	Wear rubber gloves.
Physic Protection:	Wear overalls.

Section 9：Physical and Chemical Properties

Physical state:	Odorless black rod		
pH:	Neutral	Relative density:	1.8g/cm^3
Principle:	Filtration adsorption	Melting point(℃):	3500
Main ingredients:	Activated carbon、ultra-high molecular weight polyethylene		
Identified uses:	Filtration components of water purification equipment		

Section 10： Stability and Reactivity

Chemical stability:	The battery will be stable when stored and used under room temperature.
Incompatible materials:	Strong oxide, strong acid, strong alkali.
Polymerization harm:	None
Hazardous decomposition products:	Carbon and oxygen compounds.

Section 11：Toxicological Information

Acute toxicity:	No data available
Subacute and chronic toxicity：	No data available
Irritation：	No data available
Sensitization:	None
Mutagenicity:	None
Teratogenicity:	None
Carcinogenicity :	None

Section 12：Ecological Information

Toxicity:	Acute toxicity test of fish: no data available. Daphnia acute activity inhibition test: no data available. Algae growth inhibition test: no data available. Toxicity to microorganisms: No data available.
biodegradability：	No data available
Non - biodegradability：	No data available
Bioaccumulation or bioaccumulation:	No data available

Section 13： Disposal Considerations

Contaminated packaging:	Return containers to the manufacturer or dispose the container in accordance with

national and local regulations.

Discards: Dispose according to national and local regulations.
See section 8 for personal security precautions during waste disposal.

Section 14：Transport Information

UN number: None

UN transport name： None

Packing mark: None

Packing category: None

Packing method: Pack as instructed by the manufacturer.

Pack as instructed by the manufacturer.: Transportation vehicles shall be equipped with corresponding varieties and quantities of fire fighting equipment and emergency treatment equipment for leakage.It is strictly prohibited to mix with oxidants, edible chemicals, etc.
The exhaust pipe of the vehicle carrying the article must be equipped with a fire retardant device.
The tank (tank) truck should have a grounding chain during transportation, and a hole partition plate can be set in the tank to reduce static electricity generated by vibration.It is best to transport in the morning and evening in summer.
It is forbidden to use mechanical equipment and tools that easily generate sparks for loading and unloading.
During transportation, it should be protected from sun, rain and high temperature.
Stay away from kindling, heat source and high temperature area during stopover.
Road transport should follow the prescribed route and not stay in residential and densely populated areas.It is forbidden to slip during railway transportation.
It is strictly prohibited to use wooden boats and cement boats for bulk transportation.
Dangerous signs and announcements shall be posted on the means of transport according to the relevant transport requirements.

Section 15：Regulatory Information

Regulatory information: The following laws, regulations, rules and standards provide for the management of the chemical:Component Paraffin Wax CAS: 7440 - 44 - 0
Law of the People's Republic of China on Prevention of Occupational Diseases:
Classification Catalogue of Occupational Hazards (2015): Not Included
Regulations on Safety Management of Hazardous Chemicals:
Catalogue of Dangerous Goods Chemicals (2015): Not Included
List of Explosion - prone Hazardous Chemicals (2017): Not included
List of Dangerous Chemicals under Key Supervision:
List of the first and second batch of key regulated hazardous chemicals: not included
Measures for Registration of Environmental Management of Hazardous Chemicals (Trial):
List of Hazardous Chemicals for Key Environmental Management: Not Included

Regulations on the Administration of Narcotic Drugs and Psychotropic Substances:
Catalogue of narcotic drugs: not included
Catalogue of psychotropic drugs: not included
Environmental management measures for new chemicals:
List of Existing Chemical Substances in China (2013): Included

Section 16：Other Information

Preparation and revision of information:

This is version 1.0 in compliance with GB/T 16483-2008, GB/T 17519-2013 and GB 30000 classification standards.

Abbreviations and acronyms:

MAC: maximum allowable concentration refers to the concentration where toxic chemicals should not exceed during any time during a working day.
Allows PC - TWA: time weighted average concentration (permissible concentration - time weighted average), refers to the time for weight regulation, 40 h week 8 h working day average permissible exposure concentration.
PC - STEL: short time contact allowable concentration (permissible concentration - short term exposure limit), refers to under the premise that comply with the PC - TWA allows the concentration of short contact time (15 min).

References:

International Programme on Chemical Safety: International Chemical Safety Card (ICSC) Website: http://www.ilo.org/dyn/icsc/showcard.home
International Agency for Research on Cancer http://www.iarc.fr/
The OECD Global portal to Information on Chemical Substances.
Website: http://www.echemportal.org/echemportal/index?PageID = 0& request_locale = en
The CAMEO Chemicals Database,
website http://cameochemicals.noaa.gov/search/simple
United States National Library of Medicine: Chemical Database
Website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp
United States Environmental Protection Agency:Integrated Risk Information System (epa) : integrated risk information system, website: http://cfpub.epa.gov/iris/
U.S. Department of Transportation: Emergency Response Guidelines,
website: http://www.phmsa.dot.gov/hazmat/library/erg
GESTIS – Databases on Hazardous Substances http://gestis-en.itrust.de/

Disclaimer:

This MSDS applies only to the included products, and not to mixtures of these products and other substances unless specified otherwise in the document.
This MSDS provides safety guidance with regard to handling the product exclusively for those who have received proper profession training in related areas.
Users must reassess the applicability of this MSDS. The author of this MSDS will be relieved from liability for safety issues and subsequent damages caused by using this document.