



Shenzhen Clean Environmental Protection Technology Co., Ltd.

According to UN GHS (the 7<sup>th</sup> revised edition)

# Material Safety Data Sheet (MSDS)

Activated carbon

Model No.: gx20

Written by: Linda  
(Linda)

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(Jose)



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## Material Safety Data Sheet

Revision date: Aug. 13, 2019

Client No.: NM55LQH

Version: 1.0

Product name: Activated carbon

MSDS No.: E55 180,811,002.LQH

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### Section 1 - Product and Company Identification

#### 1.1. Product Identification:

Product name: Activated carbon

Model No.: gx20

Logo:



#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Purifying and filtering air and water quality

Use advised against: Not available

#### 1.3. Details of the Manufacturer or applicant

Manufacturer: Shenzhen Clean Environmental Protection Technology Co., Ltd.

Address: No. 218, A Building, Huaqiao New Town, Minzhi Street, Longhua District, Shenzhen

Telephone: +86-13926565077

Fax: +86-755-83346763

Post code: 518000

E-mail: 13926565077@163.com

#### 1.4. Emergency telephone number

Emergency telephone: +86-755-83346763

### Section 2 - Hazard Description

Hazard class and label elements of the product according to GHS (the 7<sup>th</sup> revised edition):

#### 2.1. GHS Classification of substance or mixture:

Non-hazardous substance or mixture.

#### 2.2. Label elements:

Hazard pictograms: Not applicable.

Signal word: Not applicable.

Hazard statements: Not applicable.

#### 2.3. Other Hazards: None.

### Section 3 - Composition / Ingredient Data

Address: 3F, Block E, Huaide Building, Fuyong, Bao'an Dist, Shenzhen, Guangdong 518000

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3.1. Material: Not applicable

3.2. Mixture

| Chemical Name           | CAS #     | Percent (by weight) |
|-------------------------|-----------|---------------------|
| Carbon                  | 7440-44-0 | 85                  |
| Carboxymethyl cellulose | 9004-32-4 | 10                  |
| Water                   | 7732-18-5 | 5                   |

### Section 4 - First Aid Measures

4.1. General advice:

Show this safety data sheet to the doctor in attendance. After receiving the first-aid measure required, consult a physician if necessary.

4.2. Skin contact:

Remove contaminated clothing and shoes immediately. Wash off with mild soap and plenty of water. If skin irritation persists, consult a physician immediately.

4.3. Eyes contact:

Check for and remove any contact lenses. Get medical attention. Immediately flush eyes with running water for at least 30 minutes, disappear until the chemical residues so far, keeping eyelids open. Provide a readily-accessible eyewash facility and quick-drench safety shower. Do not rubbing eyes with hand.

4.4. Inhalation:

Move exposed person to fresh air. Keep person warm and at rest. If not breathing or if breathing is irregular, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

4.5. Ingestion:

Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.



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#### 4.6. Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

#### 4.7. Immediate / special treatment:

Continue with first aid measures. Treat symptomatically and supportively. Symptoms may be delayed.

### Section 5 – Firefighting Measures

#### 5.1. Extinguishing method and extinguishing agent

Suitable fire extinguishing agent: Use dry sand, dry chemical or CO<sub>2</sub> foam extinguishing. Water spray can be used to cool fire exposed containers/materials. Use extinguishing media most appropriate for the surrounding fire.

Unsuitable fire extinguishing agent: Do not use a solid water stream as it may scatter or spread fire.

#### 5.2. Special hazards arising from the substance or mixture:

In combustion emits toxic fumes.

#### 5.3. Advice for fire-fighter:

Firefighters must wear self-contained breathing apparatus, wear full body fire suit, fire extinguishing in the upwind. As far as possible will be transferred to empty containers from the scene. Keep the fire water spray container cooling, until the end of fire. If the containers in the fire ground have been color, must be evacuated immediately. Isolated accident scene, prohibit access. Receiving and processing of fire, to prevent environmental pollution

### Section 6 - Accidental Release Measures

#### 6.1. Personal precautions, protective equipment and emergency procedures:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spill material, avoid slipping. Avoid breathing dusts. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8).

#### 6.2. Environmental precautions:

Prevent further leakage or spillage if safe to do so. To prevent leak into the water, the basement and limited space. Prevent entry into the sewage system.

#### 6.3. Collecting, clearing method and disposal material

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

Disposal: Contaminated material must be disposed of in accordance with all State and/or Local regulations

### Section 7 - Handling and Storage

#### 7.1 Handling precautions:

Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Avoid contact eyes and skin. Do not ingest. Avoid breathing dust. Normal measures for preventive fire protection. Observe good housekeeping procedures and hygiene practices. Wash thoroughly after handling. Avoid dust formation. Provide for appropriate exhaust ventilation and dust collection at machinery. Handling carefully to prevent damage the packaging and container. Equipped with corresponding varieties and number of fire equipment and spill contingency processing equipment. Keep away from oxidants, moisture-proof, it may be flammable to heat up after damp

#### 7.2 Information about protection against explosions and fires:

Non inflammable and explosive products, general rules of fire prevention should be observed. Keep away from open fires, fire sources and water.

#### 7.3 Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10). Keep away from heat/sparks/open flames/water. Keep container tightly closed and sealed until ready for use. Equipped with corresponding varieties and number of fire equipment and spill contingency processing equipment. Avoid contact with children, avoid eating. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

#### 7.4 Packaging materials:

Recommended-Use original container.

### Section 8 - Exposure Controls/ Personal Protection

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### 8.1. Exposure limit:

| Chemical Name | CAS #     | Limit   |
|---------------|-----------|---|
| Carbon        | 7440-44-0 | TWA 3.5mg/m <sup>3</sup> ; STEL 7 mg/m <sup>3</sup> |

### 8.2. Engineering control:

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location. Set up emergency exit and necessary risk-elimination area

### 8.3. Personal protection:

#### Respiratory protection:

Use a respirator with an approved filter in case of dust formation, on production of dust provide adequate extraction

#### Eye protection:

Wear safety glasses when there is a potential for eye contact

#### Skin and body protection:

Tightly fitting safety goggles (approved by EN 166(EU) or NIOSH (US))

#### Hands protection:

Wear protective gloves (such as butyl rubber), passing the tests according to EN 374(EU), US F739 or AS/NZS 2161.1 standard

#### Other protection:

Smoking, eating and drinking water is forbidden in the workplace. After work, shower and change clothes. To maintain good health habits.

## Section 9 - Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

|                                     |                                  |
|-------------------------------------|----------------------------------|
| Appearance:                         | Grain, black                     |
| Odor:                               | Odorless                         |
| Melting point / freezing point(°C): | 3550±50                          |
| Boiling point(°C):                  | 4200                             |
| Flash point( Closed cup, °C):       | No data available/Not applicable |

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|   |   |
|---|---|
| Steam pressure(20℃):                    | No data available/Not applicable                        |
| Relative density (water=1, 20℃):        | 1.8-2.1   |
| Partition coefficient: n-octanol/water: | No data available/Not applicable                        |
| Decomposition temperature(℃):           | No data available/Not applicable                        |
| pH value:                               | 6-9   |
| Explosion limit:                        | No data available/Not applicable                        |
| Vapor density:                          | No data available/Not applicable                        |
| Water soluble:                          | Insoluble in water                                      |
| Auto-ignition temperature:              | No data available/Not applicable                        |
| Flammability (solid, gas):              | Flammable   |
| Oxidizing properties:                   | The substance or mixture is not classified as oxidizing |

### 9.2. Other safety information

No data available/Not applicable

## Section 10 - Stability and Reactivity

### 10.1. Stability:

The product is chemically stable.

### 10.2. Reactivity:

Stable under recommended storage and handling conditions.

### 10.3. Incompatible materials:

Strong oxidizing agent

### 10.4. Conditions to avoid:

Incompatible materials, all ignition sources including heat, sparks and flame and water.

### 10.5. Hazardous Polymerization:

Will not occurs.

### 10.6. Hazardous decomposition products:

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11 - Toxicological Information

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### 11.1. Acute toxicity:

| Component               | CAS No.   | LD <sub>50</sub> (Oral)               | LD <sub>50</sub> (Dermal) | LC <sub>50</sub> (Inhalation)    |
|-------------------------|-----------|---------------------------------------|---------------------------|----------------------------------|
| Carbon                  | 7440-44-0 | Rat: >5000mg/kg                       | No data                   | No data                          |
| Carboxymethyl cellulose | 9004-32-4 | Rat: 27000mg/kg<br>Mouse: >27000mg/kg | Rabbit: >2000mg/kg        | Rat: >5800 mg/m <sup>3</sup> /4H |

### 11.2. Skin corrosion/irritation:

Allergic persons to the substances contained, may be irritating to skin. Will not irritate to skin under normal conditions.

### 11.3. Eye corrosion/irritation:

If dusts enter the eyes will stimulate the eyes

### 11.4. Respiratory or skin sensitization:

These products are not known to cause human skin or respiratory sensitization

### 11.5. Germ cell mutagenicity

According to the existing data, the product is not classified.

### 11.6. Carcinogenicity:

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH

### 11.7. Reproductive toxicity:

According to the existing data, the product is not classified.

### 11.8. Specific target organ toxicity - single exposure

According to the existing data, the product is not classified.

### 11.9. Specific target organ toxicity - repeated exposure:

According to the existing data, the product is not classified.

### 11.10. Aspiration hazard:

According to the existing data, the product is not classified.

## Section 12 - Ecological Information

### 12.1. Ecotoxicity values:

This product contains no hazardous or toxic substances, and presents a negligible impact on the environment based on its reported use pattern

### 12.2. Persistence and degradability:

The products are usually with natural biodegradable.



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### 12.3. Bio accumulative potential:

The potential for bioaccumulation of this material in aquatic organisms is low.

### 12.4. Mobility in soil:

No data.

### 12.5. Other adverse effects:

Harmless to water, but without government permission, do not dispose directly into rivers, watercourses or drains.

## Section 13 - Disposal Considerations

### 13.1. Waste:

Should be recycled. Ignition under control or landfill should only be considered when recycling is not feasible.

### 13.2. Contaminated packaging:

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

### 13.3. Disposal considerations:

Processing, use or contamination of this product may change the waste management options. Dispose of container and unused contents in accordance with national and local relevant regulations laws.

## Section 14 - Transport Information

According to IATA DGR 59<sup>th</sup> Edition for transportation, IMO International Maritime Dangerous Goods Code, European Agreement Concerning the International Carriage of Dangerous Goods by Road.

The products are not subject to IATA DGR, IMDG and ADR/RID.

### 14.1 UN number

ADR, RID, IMDG, IATA: Not regulated

### 14.2 UN proper shipping name

ADR, RID, IMDG, IATA: Not regulated

### 14.3 Transport hazard class(es)

ADR, RID, IMDG, IATA: Not regulated

### 14.4 Packaging group

ADR, RID, IMDG, IATA: Not regulated

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### 14.5 Environmental hazards

IMDG Marine pollutant: No

14.6. Shipping note: Should check whether the container is full, sealed before shipping. Ensure that the product does not collapse, fall, and not damaged in transport process. Transportation should prevent insolation and high temperature and water.

## Section 15 - Regulatory Information

15.1. Regulatory information: Reference to the local, national, US, EU, CA and international regulations.

| CAS No.   | TSCA   | EINECS | DSL    | IECSC  | NZIoC  | PICCS  | KECI   | AICS   |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 7440-44-0 | Listed | Listed | Listed | Listed | Listed | Listed | Listed | Listed |
| 9004-32-4 | Listed | Listed | Listed | Listed | Listed | Listed | Listed | Listed |
| 7732-18-5 | Listed | Listed | Listed | Listed | Listed | Listed | Listed | Listed |

TSCA: United States Toxic Substances Control Act Inventory

EINECS: European Inventory of Existing Commercial Chemical Substances

DSL: Canadian Domestic Substances List

IECSC: China Inventory of Existing Chemical Substances

PICCS: Philippines Inventory of Chemicals and Chemical Substances

NZIoC: New Zealand Inventory of Chemicals

KECI: Existing and Evaluated Chemical Substances

AICS: List of existing chemical substances in Australia

## Section 16 - Other Information

### Abbreviations or phrases:

|        |   |
|--------|---|
| ACGIH  | : American Conference of Governmental Industrial Hygienists                           |
| ADR    | : European Agreement concerning the International Carriage of Dangerous Goods by Road |
| CAS    | : Chemical Abstracts Service  |
| CLP    | : Classification, labeling and packaging  |
| EC     | : Council of Europe   |
| ECHA   | : European Chemicals Agency   |
| EINECS | : European Inventory of Existing commercial Chemical Substances                       |

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|          |  |
|----------|--|
| GHS      | Globally Harmonized System of Classification and Labelling of Chemicals                        |
| IARC     | International Agency for Research on Cancer  |
| IATA     | International Air Transport Association  |
| ICAO     | International Civil Aviation Organization  |
| IMDG     | International Maritime Dangerous Goods Code  |
| IC50     | Inhibitory Concentration 50%   |
| LC50     | Lethal Concentration 50%   |
| LD50     | Median Lethal Dose 50%   |
| MAPROL   | International Convention for the Prevention of Pollution from Ships                            |
| REACH    | REGULATION concerning the Registration, Evaluation, Authorization and Restriction of Chemicals |
| RID      | Regulation for rail international transportation of Dangerous goods                            |
| STEL     | Short Term Exposure Limit  |
| TWA      | Time Weighted Average  |
| MAC      | Maximum Allowable Concentration  |
| OSHA     | Occupational Safety and Health Administration  |
| NIOSH    | National Institute for Occupational Safety and Health  |
| TLV      | Threshold Limit Value  |
| TLV-TWA  | Threshold Limit Value-Time Weighted Average  |
| TLV-STEL | Threshold Limit Value-Short term Exposure Limit  |
| PC-TWA   | Permissible Concentration-Time Weighted Average  |
| PC-STEL  | Permissible Concentration-Short Term Exposure Limit  |
| PEL      | Permissible Exposure Limit   |
| OELs     | Occupational Exposure Limits   |

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