SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Active Carbon
NAME OF MANUFACTURER : GL Sciences Inc.
ADDRESS : 22-1 Nishishinjuku 6-chome Shinjuku-ku Tokyo 163-1130, Japan
CHARGE SECTION : International Sales Section
TELEPHONE No. : +81-3-5323-6620
FACSIMILE No. : +81-3-5323-6621
PRODUCT No. : 1001-13003, 1001-13006, 1001-13008, 1001-13053, 1001-13056, 1001-13058, 1003-
SDS No. : 1001-0197

Research use only.

2. HAZARDS IDENTIFICATION

This product is the packing material using for such as chromatography analysis, researches and developments.
Although the column packed with is not dangerous goods, we show some data about this packing material for the information supplement below.

GHS CLASSIFICATION : Classification not possible
HAZARDS SYMBOL : - - -
SIGNAL WORD : - - -
HAZARD STATEMENTS : - - -
PRECAUTIONARY STATEMENTS : - - -
OTHER INFORMATIONS : Highly flammable if powdered. Combustible depending on physical form.
May cause skin, eye, nose and throat irritation by contacting or inhalation.
Particularly in wet state, active carbon is adsorbing atmospheric oxygen and may lead to hypoxia with treating large quantity in closed or sealed area.
Dispose of contents/container in accordance with all applicable regulations.

MOST IMPORTANT HAZARDS : Eye irritation, skin irritation, digestive tract irritation, respiratory tract irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY : Carbon
SYNONYMS : Active Carbon, Carbon activated, Active carbon
CHEMICAL FOMULA : C
MOLECULAR WEIGHT : 12.011
CONTENT : 100%
CAS No. : 7440-44-0
TSCA INVENTRY : Listed
EINECS No. : 231-153-3
EC INDEX No. : Not established

4. FIRST AID MEASURES

GENERAL ADVICE : Wash off immediately with soap and plenty of water. In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit. Use personal protective equipment.
INHALATION : Move victim to fresh air and gargle. If breathing is difficult, give oxygen.
If irritation persists, consult a physician.
SKIN CONTACT : Remove contaminated clothes and shoes, rinse skin with plenty of water or shower. Use soap to help assure removal. If irritation persists, consult a physician.
EYE CONTACT : Remove any contact lenses at once. Flush eyes well with flooding large amounts of running water for at least 15 minutes. Never rub your eyes. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a physician.
INGESTION : Rinse mouth, give plenty of water to vomit. Never give anything by mouth to an unconscious person. Consult a physician.
5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, dry chemical powder, foam, water spray

FIRE & EXPLOSION HAZARDS: Toxic and irritating dust, fumes or smoke may be emitted.

SPECIAL PROTECTIVE Equipment FOR FIRE FIGHTERS: Fireman should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Remove ignition sources and ventilate the area. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid raising dust and avoid contact with skin and eyes.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering sewers, watercourses or low areas. Comply with local disposal regulations.

METHODS FOR CLEANING UP: Do not touch spilled material without suitable protection. After material is completely picked up, wash the spill site with soap and water and ventilate the area. Pull all wastes in a plastic bag for disposal and seal it tightly. Remove, clean, or dispose contaminated clothing.

7. HANDLING AND STORAGE

HANDLING: Avoid contact with heat, fire, open-flame. -No smoking.

STORAGE: Store away from sunlight in a cool well-ventilated dry place. Keep container tightly closed.

INCOMPATIBLE PRODUCTS: Oxidizers and acids

8. EXPOSURE CONTROL/PERSONAL PROTECTION

ENGINEERING MEASURES: Use exhaust ventilation to keep airborne concentrations below exposure limits. Use adequate ventilation.

VENTILATION: Local Exhaust; Necessary, Mechanical(General); Recommended

CONTROL PARAMETERS

ACGIH: Not established
OSHA PEL: TWA 15 mg/m³(Total dust as graphite), TWA 5 mg/m³(resp. as graphite)
NIOSH REL: Not established

PERSONAL PROTECTION

RESPIRATORY PROTECTION: Half or full face piece respirator, self-contained breathing apparatus, supplied air respirator, etc. Use respirators approved under appropriate government standards and follow all regulations.

HAND PROTECTION: Safety gloves
EYE PROTECTION: Safety glasses(goggles)
SKIN PROTECTION: Protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Black

SHAPE: Solid (powder)

ODOR: Odorless

pH: 6 - 8 in water

BOILING POINT: No data available

MELTING POINT: No data available

FLASH POINT: No data available

FLAMMABILITY: No data available

AUTOIGNITION TEMPERATURE: 250 °C

VAPOR PRESSURE: No data available

SPECIFIC GRAVITY (DENSITY): 0.40 - 0.50 g/mL

SOLUBILITY IN

Water: Insoluble

Organic solvent: No data available

PARTITION COEFFICIENT ; n-octanol/water: No data available

DECOMPOSITION TEMPERATURE: No data available
10. STABILITY AND REACTIVITY

**REACTIVITY**: Stable under recommended using and storage conditions.

**CHEMICAL STABILITY**: Stable under recommended storage and using conditions.

**CONDITION TO AVOID**: Sunlight, heat, moisture, CO₂, oxidizers, acids, O₃, Liquid nitrogen

**INCOMPATIBLE MATERIALS**: Oxidizers, acids, O₃, Liquid nitrogen

**HAZARDOUS DECOMPOSITION PRODUCTS**: CO, NOₓ

11. TOXICOLOGICAL INFORMATION

**ACUTE TOXICITY**: oral rat; >5000 mg/kg (RTECS)

**SKIN CORROSION/IRRITATION**: No data available

**EYE DAMAGE/EYE IRRITATION**: No data available

**GERM CELL MUTAGENICITY**: No data available

**TOXIC TO REPRODUCTION**: No data available

**CARCINOGENICITY**: No report in NTP and IARC.

**REPRODUCTIVE TOXICITY**: No data available

**SPECIFIC TARGET ORGAN TOXICITY**: No data available

**ASPIRATION TOXICITY**: No data available

12. ECOLOGICAL INFORMATION

**ECOTOXICITY**: No data available

**BIODEGRADABILITY**: May not occur microbial degradation.

**BIOACCUMULATION POTENTIAL**: No data available

**MOBILITY IN SOIL**: No data available

**OTHER ADVERSE EFFECTS**: Not listed in Montreal Protocol list.

13. DISPOSAL INFORMATION

Dispose in a hazardous-waste site in accordance with all applicable regulations. Any disposal practice must be in compliance with country, local, state, and federal laws and regulations (contact country, local or state environment agency for specific rules).

14. TRANSPORT INFORMATION

**IATA**: Not dangerous goods

**ADR/RID**: Not dangerous goods

**DOT(Department of Transportation)**: Not dangerous goods

**MARINE POLLUTANT**: Not classified

15. REGULATORY INFORMATION

**US REGULATIONS**: Labeling according to US regulation; See section 2

**EU REGULATIONS**: Labeling according to EC Directives; See section 2

16. OTHER INFORMATION

**NOTICE**: The information contained in the SDS description is applicable exclusively to the chemical substance identified herein and for its intended use as an analytical reference standard or reagent and to the unit quantity intended for that purpose. The information does not relate to, and may not be appropriate for, any application or larger quantity of the substance described. Our products are intended for the use by individuals possessing sufficient technical skill and qualification on use the material potential hazardous chemical. Accordingly, no representation or warranty, express or implied, with respect to merchantability and fitness for a particular purpose is made with respect to the information contained herein.

Attention:
This product in terms of chemical identity and the unit amount provide is intended for use in chemical analysis and not for human consumption, nor any other purpose.