SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Unicarbon A-200 NAME OF SUPPLIER : 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. : 1001-53201, 1001-, 1003-

SDS No. : 1001-53201

Research use only.

2. HAZARDS IDENTIFICATION

Unicarbon A-200 is a set product consisted of two packing materials, a column for GC analysis and a pre-column. And this product is using for such as chromatography analysis, researched and developments.

《Packing material for Analysis column》

GHS CLASSIFICATION : Classification not possible

HAZARDS SYMBOL : - - - SIGNAL WORD : - - - PRECAUTIONARY STATEMENTS : - - -

OTHER INFORMATIONS : May be harmful if inhaled and ingested.

May cause eye and skin irritation.

Dispose of contents/container in accordance with all applicable regulations.

《Packing material for Pre-column》

GHS CLASSIFICATION : Classification not possible

HAZARDS SYMBOL : --SIGNAL WORD : --HAZARD STATEMENTS : --PRECAUTIONARY STATEMENTS : ---

OTHER INFORMATIONS : May be harmful if inhaled and ingested.

May cause eye and skin irritation.

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 : Mixture

《Packing material for Analysis column》

| CHEMICAL NAME | CONTENT | CHEMICAL FORMULA | CAS No. | TSCA INVENTRY | EINECS No. | EC INDEX No. |
|-----------------------------------|---------|---------------------|------------|------------------|-----------------|-----------------|
| PEG-1500 (Polyethylene Glycol) | 0.2 % | H(OCH2CH2)nOH | 25322-68-3 | Listed | Not established | Not established |
| Graphite carbon (synthetic) | 99.8 % | С | 7782-42-5 | Listed | 231-955-3 | Not established |

《Packing material for Pre-column》

| _ | | | | | | |
|-----------------------------------|---------|---------------------|------------|------------------|-----------------|-----------------|
| CHEMICAL NAME | CONTENT | CHEMICAL FORMULA | CAS No. | TSCA INVENTRY | EINECS No. | EC INDEX No. |
| PEG-1500 (Polyethylene Glycol) | 5 % | H(OCH2CH2)nOH | 25322-68-3 | Listed | Not established | Not established |
| Diatomaceous earth | 95 % | SiO2 | 68855-54-9 | Listed | 272-489-0 | Not established |

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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. Do not rub eyes. Flush eyes well with

flooding large amounts of running water for at least 15 minutes. 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 eyes, skin, and clothing. Avoid prolonged or repeated

exposure. Handle this product with appropriate protective equipments.

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 | OSHA | NIOSH | |
|---------------------|-----------------|---|----------------------------------|--|
| Graphite carbon | 2 mg/m³ (resp) | 15 mg/m³ (total) 5 mg/m³ (resp) | Not established | |
| Diatomaceous earth | Not established | 80 mg/m³/%SiO(2)+2 (as amorphous silica) | 6 mg/m³ (as amorphous silica) | |
| Polyethylene glycol | 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

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : white to pale yellowish-white, powder (Diatomaceous earth)

Black, powder (Graphite carbon)

ODOR : Odorless

No data available pН **BOILING POINT** No data available **MELTING POINT** No data available **FLASH POINT** No data available **FLAMMABILITY** No data available **AUTOIGNITION TEMPERATURE** No data available VAPOR PRESSURE No data available SPECIFIC GRAVITY (DENSITY) : No data available

SOLUBILITY IN

Water : Insoluble
Organic solvent : Insoluble
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

INCOMPATIBLE MATERIALS : Oxidizers, acids

HAZARDOUS DECOMPOSITION PRODUCTS : CO, CO2

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY : No data available 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 data available REPRODUCTIVE TOXICITY : No data available

: No data available

ASPIRATION TOXICITY : No data available

12. ECOLOGICAL INFORMATION

SPECIFIC TARGET ORGAN TOXICITY

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

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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.