SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Hexadecanoic Acid 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. : 1021-43160 SDS No. : 1021-43160

Research use only.

2. HAZARDS IDENTIFICATION

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 : Hexadecanoic Acid

SYSNONYM : Palmitic Acid CHEMICAL FOMULA : CH3(CH2)14COOH

CONTENT : > 99.0%

CAS No. : 57-10-3

TSCA INVENTRY : Listed

EINECS No. : 200-312-9

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. 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. Assure adequate flushing by separating the eyelids with sterile fingers. If irritation persists, consult a

physician.

INGESTION : Rinse mouth, give plenty of water to dilute the substance. Do not induce

vomiting. 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, irritating, fumes or smoke may be emitted.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS

: Firemen should wear normal protective equipment(full bunker gear) and

positive-pressure self-contained breathing apparatus.

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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.

ENVIROMENTAL PRECATIONS

: Prevent spills from entering sewers, watercourses or low areas.

METHODS FOR CLEAN 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 suitable protection.

After using this product, dispose of contents/container in accordance with all

applicable regulations and appropriate ways.

STORAGE : Store away from sunlight in well-ventilated dry place. Keep cool.

Keep container tightly closed.

INCOMOPATIBLE PRODUCTS : Strong oxidizers and acids, strong bases.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

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

Use only with adequate ventilation.

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

PERSONAL PROTECTION

RESPRATORY PROTECTION: Safety mask(Use respirators approved under appropriate government

standards and follow all regulations.)

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

SKIN PROTECTION : Protective clothing

CONTROL PARAMETERS

OSHA PEL : Not established ACGIH : Not established

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE : White

SHAPE : granules- powder
ODOR : No data available
pH : No data available

BOILING POINT : 390° C MELTING POINT : $60-63^{\circ}$ C

FLASH POINT : No data available FLAMMABILITY : No data available AUTOIGNITION TEMPERATURE : No data available VAPOR PRESSURE : No data available VAPOR DENCITY : No data available

DENSITY : 0.853

SOLUBILITY IN

Water : practically insoluble or insoluble

Organic solvent : soluble PARTITION COEFFICIENT: n-octanol/water

: No data available

DECOMPOSITION TEMPERATURE

: No data available

10. STABILITY AND REACTIVITY

REACTIVITY : Stable under recommended storage conditions.

CHEMICAL STABILITY : No data available CONDITION TO AVOID : Sunlight, heat

INCOMPATIBILE MATERIALS : Strong oxidizers, acids, bases

HAZARDOUS DECOMPOSITION PRODUCTS

: CO, CO2

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11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY-oral: Rat LD50>10g/kg(RTECS)

SKIN CORROSION/IRRITATION : No data available EYE DAMAGE/EYE IRRITATION : No data available GERM CELL MUTAGENICITY : No data available CARCINOGENICITY : No data available 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 : No data available BIOACCUMULATION POTENTIAL : No data available MOBILITY IN SOIL : No data available

HAZARDOUS TO THE OZONE LAYER

: 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 applicable
DOT : Not applicable
MARINE POLLUTANT : Not classified

15. REGULATORY INFORMATION

US REGULATIONS : Labeling according to US Directives; See section 2 EU REGURATIONS : 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.