SAFETY DATA SHEET

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1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : Inertsil ODS-EP
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. : 5020-02610~5020-02667, 5020-03260~5020-04860, 5020-11510~5020-11860,

5020-15010~5020-15560, 5020-15710~5020-15760, 5020-15810~5020-15960, 5020-18211~5020-18287, 5020-19010~5020-19960, 5020-20010~5020-20210,

5020-79021~5020-79025, 5020-

SDS No. : 5020-0028

Research use only.

2. HAZARDS IDENTIFICATION

Inertsil ODS-EP is the article using for such as chromatography analysis, research and development. Packing material will not leak from column under usual using conditions. We show the information about packing materials below.

GHS CLASSIFICATION : Serious eye damage/eye irritation : Category 2B

Specific target organ toxicity (single exposure)

: Category 3

(Respiratory tract irritancy)

HAZARDS SYMBOL



SIGNAL WORD : Warning

HAZARD STATEMENTS

H320 Cause eye irritation

H335 May cause respiratory irritation

PRECAUTIONARY STATEMENTS:

[Prevention]

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

[Response]

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical attention.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER or doctor if you feel unwell.

[Storage]

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

[Disposal]

P501 Dispose of contents/container in accordance with all applicable regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE / MIXTURE : Substance

CHEMICAL IDENTITY : Octadecyl group modified silica gel

SYNONYMS : ---

CHEMICAL FORMULA : (SiO₂)-(CH₂)₁₇CH₃

CONTENT : 100%

CAS RN : 112926-00-8
TSCA INVENTORY : Not Listed
EINECS No. : Not Listed

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4. FIRST AID MEASURES

GENERAL ADVICE : Wash off 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, or wipe off cleansing cream with coating, tender cloth. 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 vomit. Never give anything by mouth to an

unconscious person. If feel unwell, consult a physician.

MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED

: May cause irritation of mucous membranes, respiratory tract, skin and eyes.

5. FIRE FIGHTING MEASURES

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

FIRE & EXPLOSION HAZARDS : CO2, CO are included in a flue gas. Use cylinder-type air respiratory apparatus

at the fire extinguishing in the room.

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. Pick all wastes up 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 equipment.

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

Keep container tightly closed.

INCOMPATIBLE PRODUCTS : Oxidizers, strong acids, bases

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 TLV : Inhalable particles; TWA 10mg/m³, Respirable particles; TWA 3mg/m³

(as PNOS)

OSHA PEL : TWA 20mppcf (80mg/m³/%SiO2) (as amorphous silica)

NIOSH REL : TWA 6mg/m³ (as amorphous silica)

PERSONAL PROTECTION

RESPIRATORY PROTECTION: Safety mask, 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

PHYSICAL STATE : Solid (powder)

COLOUR : White ODOUR : Odourless

MELTING POINT / FREEZING POINT

No data available

BOILING POINT OR INITIAL BOILING POINT AND BOILING RANGE

: No data available

FLAMMABILITY : Non Flammable

LOWER AND UPPER EXPLOSION LIMIT / FLAMMABILITY LIMIT

Not applicable

FLASH POINT : No data available AUTO-IGNITION TEMPERATURE : No data available

DECOMPOSITION TEMPERATURE

: No data available

pH : No data available
KINEMATIC VISCOSITY : Not applicable
SOLUBILITY : No data available

PARTITION COEFFICIENT

n-octanol/water (log value) : No data available VAPOUR PRESSURE : No data available

DENSITY AND/OR RELATIVE DENSITY

: No data available

RELATIVE VAPOUR DENSITY : Not applicable PARTICLE CHARACTERISTICS : Spherical, <10μm

10. STABILITY AND REACTIVITY

REACTIVITY : Stable under recommended using and storage conditions.

CHEMICAL STABILITY : Stable under recommended using and storage conditions.

CONDITION TO AVOID : Sunlight, heat, moisture, CO₂, oxidizers, acids, alkalis

INCOMPATIBLE MATERIALS : Oxidizers, strong acids, bases

HAZARDOUS DECOMPOSITION PRODUCTS : CO, CO2

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY -oral: Rat; LD50 >5,000mg/kg (Precipitated silica(Tixosil53)), >5,110mg/kg

(Precipitated silica(Sident9)) (SIDS(2006), ECETOC JACC(2006))

ACUTE TOXICITY -dermal : Rabbit; LD50 >2,000mg/kg (Silica gel(Syloid244)), >5,000mg/kg (Silica gel

(ZEO49, ZEOSYL113, ZEOSYL200, ZEOFREE153)) (SIDS(2006), ECETOC

JACC(2006))

ACUTE TOXICITY -inhalation- : No data available

SKIN CORROSION/IRRITATION : No irritation in skin irritation tests (OECD TG 404, Precipitated silica(Sident9))

using rabbits (SIDS(2006), ECETOC JACC(2006)).

No irritation in skin irritation tests (24 hour exposure, Precipitated silica

(SIPERNAT)) using rabbits (SIDS(2006), ECETOC JACC(2006)).

No irritation in skin irritation tests (24 hour exposure, Silica gel(Syloid244))

using rabbits (SIDS (2006)).

EYE DAMAGE/EYE IRRITATION : Mild conjunctival redness in eye irritation tests (OECD TG 405, Precipitated

silica(Sident9)) using rabbits (SIDS(2006), ECETOC JACC(2006)).

Slight or no irritation in eye irritation tests (Precipitated silica) using rabbits

(SIDS(2006)).

SENSITIZATION : No data available GERM CELL MUTAGENICITY : No data available

CARCINOGENICITY : There is no information on carcinogenicity to humans. The evidence of

carcinogenicity is inadequate in humans and experimental animals. Therefore,

the substance is classified as Group 3 by IARC (IARC 68,1997).

REPRODUCTIVE TOXICITY : There is no information on reproductive toxicity to humans.

SPECIFIC TARGET ORGAN TOXICITY - single exposure -

: Irritating to respiratory tract (SIDS(2006), ECETOC JACC(2006))

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SPECIFIC TARGET ORGAN TOXICITY - repeated exposure -

: No adverse effects were seen in lung function and chest radiography of workers exposed to dust of this substance for an average of 8.5 years (ACGIH(7th,2001),

ECETOC JACC(2006), SIDS(2006), DFGOT vol.2(1991)).

ASPIRATION HAZARD : No data available

12. ECOLOGICAL INFORMATION

Hazardous to the aquatic environment - Acute hazard -

: Crustacea(Daphnia magna); 24-hour EC50>1000 mg/L (SIDS(2006))

Zebrafish(Danio rerio); 96-hour LC50=1000 mg/L (SIDS(2006))

Hazardous to the aquatic environment - Chronic hazard -

No data available

BIODEGRADABILITY : May not occur microbial degradation

BIOACCUMULATIVE 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 dangerous goods
ADR/RID : Not dangerous goods
DOT(Department of Transportation) : Not dangerous goods

MARINE POLLUTANT : Not classified

15. REGULATORY INFORMATION

For classification and labeling of chemicals in accordance with the applicable rules and regulations in the EU or each country, refer to GHS classification of this product (See Section 2).

US REGULATION : OSHA HCS 2012/29 CFR 1910.1200 EU REGULATION : CLP Regulation ((EC) No. 1272/2008)

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.