

# SAFETY DATA SHEET

SDS No.5010-0193

Date

December 24, 2019

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## 1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME : InertSep GC/SAX/PSA  
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  
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PRODUCT No. : 5010-68044, 5010-68045, 5010-  
SDS No. : 5010-0193  
Research use only.

## 2. HAZARDS IDENTIFICATION

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 :

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.  
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P312 Call a POISON CENTER or doctor if you feel unwell.  
P337+P313 If eye irritation persists: Get medical attention.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P501 Dispose of contents/container in accordance with all applicable regulations.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL IDENTITY : Mixture

This product is a combination of a single component.

CHEMICAL NAME	CONTENT	CHEMICAL FORMULA	CAS RN	TSCA INVENTORY	EINECS No.
Graphite carbon black	100%	C	1333-86-4	Listed	215-609-9
Trimethylaminopropyl group modified silica gel	100%	-(SiO <sub>2</sub> )-(CH <sub>2</sub> ) <sub>3</sub> N <sup>+</sup> (CH <sub>3</sub> ) <sub>3</sub>	112926-00-8	-	-
Ethylenediamine-N-propyl group modified silica gel	100%	(SiO <sub>2</sub> )-(CH <sub>2</sub> ) <sub>3</sub> NH(CH <sub>2</sub> ) <sub>2</sub> NH <sub>2</sub>	112926-00-8	-	-

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. 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 : CO<sub>2</sub>, CO are included in a flue gas. Use cylinder-type air respiratory apparatus at the fire extinguishing in the room.  
Pay attention to shatter-resistant this product.
- 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 equipment.
- STORAGE : Store it in a refrigerator (2-10 °C)  
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

Chemical name (or common name)	ACGIH TLV	OSHA PEL	NIOSH REL
Graphite carbon black	TWA=3.5mg/m <sup>3</sup>	TWA=3.5mg/m <sup>3</sup>	TWA=3.5mg/m <sup>3</sup>
Trimethylaminopropyl group modified silica gel	Inhalable dust TWA=10mg/m <sup>3</sup> , Respirable dust TWA=3mg/m <sup>3</sup> (as PNOS)	80mg/m <sup>3</sup> /%SiO <sub>2</sub> (as amorphous silica)	TWA=6mg/m <sup>3</sup> (as amorphous silica)
Ethylenediamine-N-propyl group modified silica gel			

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

PHYSICAL STATE : Solid (powder)

COLOUR : Black (GC)/White(SAX&PSA)

ODOUR : Odourless

MELTING POINT / FREEZING POINT : > =3000 °C (GC)/No data available(SAX&PSA)

BOILING POINT OR INITIAL BOILING POINT AND BOILING RANGE : > =3000 °C (GC)/No data available(SAX&PSA)

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 IN

Water : Insoluble

Organic solvent : Insoluble

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 : 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, CO <sub>2</sub> , oxidizers, acids
INCOMPATIBLE MATERIALS	: Oxidizers, acids
HAZARDOUS DECOMPOSITION PRODUCTS	: CO, CO <sub>2</sub>

**11. TOXICOLOGICAL INFORMATION**

ACUTE TOXICITY	:
(GC)	: LD <sub>0</sub> value of >8000 mg/kg bw for rats (IUCLID (2000)) LD <sub>50</sub> value is >3 mg/kg for rabbits (RTECS (2008))
(SAX&PSA)	: Not classified (oral, dermal) Classification not possible, No data available (inhalation(dust, mist))
SKIN CORROSION/IRRITATION	:
(GC)	: Results of "no irritating" in 4 tests with rabbits (one test was conducted according to OECD TG404) (IUCLID (2000)).
(SAX&PSA)	: Not classified
EYE DAMAGE/EYE IRRITATION	: Category 2B
(GC)	: Based on results of "no irritating" in 3 tests with rabbits (IUCLID (2002)), the substance was classified as "Not classified". Although there is a result of "irritating" in a human test (IUCLID (2002)), the details are not clear. It has been suggested that the fine grain may be irritating mechanically (HSDB (2003)).
SENSITIZATION	: Classification not possible, No data available
GERM CELL MUTAGENICITY	: Classification not possible
(GC)	: Although there is a positive result in a rat alveolar cell HPRT gene mutation test by inhalation exposure and intratracheal administration (in vivo somatic cell mutagenicity test) (DFGOT vol.18 (2002)), this positive result is considered not to indicate the germ cell mutagenicity of carbon black since it is thought to be induced by the polycyclic aromatic hydrocarbons present in the substance or by reactive oxygen species due to inflammation reaction.
CARCINOGENICITY	: Classification not possible
(GC)	: Inadequate evidence of carcinogenicity in humans (IARC 68 (1997)) Based on the classification of "Group 2B" in IARC and Category 2B in Japan Society For Occupational Health (JSOH), the substance was classified into Category 2. In a 24-month inhalation test in rats, the incidence of primary lung neoplasms was increased significantly and was dose related. The types of neoplasms were identical and included benign adenomas, malignant adenocarcinomas, squamous-cell carcinomas, and adenosquamous carcinomas (EHC No.171 (1996)). In a rat test, the 43-week and 86-week exposure groups had a lung tumour rate of 18% and 8%, respectively, with no tumours observed in the control group (IARC vol.65 (1996)). IARC in group 2B (IARC 93 (2010)), ACGIH is classified into A3 (ACGIH (7th, 2011)), which is based on inhalation experiments by rats. For humans, epidemiological studies in Europe and the United States have also been concluded as "inappropriate as evidence to classify carcinogenicity" due to inadequate methodological deficiencies and lack of number of subjects to be investigated.
REPRODUCTIVE TOXICITY	: Classification not possible, No data available
SPECIFIC TARGET ORGAN TOXICITY - single exposure -	:
(GC)	: Irritating to respiratory tract (SIDS (2006), ECETOC JACC (2006)) Although there is a report of behavioral somnolence as a symptom after oral administration to rats (15,400 mg/kg) (RTECS (2008)), the details are unknown, therefore, classification was not possible due to lack of sufficient data.

**SPECIFIC TARGET ORGAN TOXICITY - repeated exposure -**

(GC) : Classification not possible  
 : Numerous epidemiological tests for carbon black workers were conducted. In workers exposed for long term (10 years and more), the following symptoms characteristic of the lung occurred; cough, sputum, chronic bronchitis, lung function disturbances, pneumoconiosis, emphysema, disturbance of lung perfusion, obstructive disturbance of ventilation, bronchial hyper-reactivity and decrease in airway resistance and expiratory flow (IARC vol.65 (1996)). In addition, it was reported that fine, diffuse changes were observed in the chest radiogram, and histological examination revealed deposits of carbon black particles and reticular fibrosis with associated emphysema (IARC vol.65 (1996)).

ASPIRATION HAZARD : Classification not possible, No data available

**12. ECOLOGICAL INFORMATION**

ECOTOXICITY : Not classified  
 (GC) : Classified into Not classified since it is suggested not to show the toxicity at the concentration of water solubility (insoluble (HSDB,2009)) from its 72h-ErC50 >10000 mg/L for algae (Scenedesmus) (SIDS,2006), its 24h-LC50 >5600 mg/L for Crustacea (Daphnia magna) (SIDS,2006) and its 96h-LC50 >1000 mg/L for fish (Tribolodon hakonensis) (SIDS,2006).

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.