

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Commercial Name: Shim-pack XR-ODS (228-41605-XX, 228-41606-XX, 228-41607-XX),
Shim-pack XR-ODSII (228-41623-XX, 228-41624-XX, 228-59907-XX),
Shim-pack XR-ODSIII (228-59910-XX)

General Use: For HPLC

Manufacturer's Name: Shimadzu Corporation

Address: 1, Nishinokyo-Kuwabaracho Nakagyo-ku, Kyoto 604-8511, Japan

Emergency Phone: 81(75)823-1274

Emergency Fax: 81(75)811-8187

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not classified as dangerous by EEC directive on harmful substances and by directive on harmful compounds.

HAZARD SYMBOL : Not classified

POTENTIAL HEALTH HAZARDS

Inhaled : Dust is irritating to the respiratory tract.

In contact with skin : Skin irritation is not expected from normal use and handling.

In contact with eyes : May cause eye irritation if dust gets into eyes.

Ingested : This material is expected to be practically non-toxic orally

Additional Information: All data is based on unbonded silica gel. Bonded silica gel have not been tested for their health effects

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	Formula	CAS No.	Content
n-Octadecyl bonded Silica Gel	$\text{CH}_3(\text{CH}_2)_{17}\text{Si}(\text{CH}_3)_2\text{O-SiO}_2$	146019-53-6	90~100%

4. FIRST AID MEASURES

INHALATION :

Remove the person to fresh air. Get medical attention for any breathing difficulty.

SKIN CONTACT :

Skin irritation is not expected from normal use and handling. Wash with soap and warm water.

Get medical advice if irritation develops.

EYE CONTACT :

Immediately flush eyes with plenty of clean running water and continue for 15 minutes holding the eye lids open. Get medical attention immediately.

INGESTION :

Give one to two glasses of water. If a large amount of product was swallowed, get medical advice.

5. FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES : Not Available

EXTINGUISHING MEDIA : Water, Dry Chemical Form, CO₂

UNSUITABLE EXTINGUISH MEDIA/METHODS : None

UNUSUAL FIRE AND EXPLOSION HAZARDS : None

SPECIAL FIREFIGHTING PRECAUTIONS/INSTRUCTIONS : Use protective clothing and breathing equipment appropriate for the surrounding fire.

HAZARDOUS COMBUSTION PRODUCT OR GASES : No Data

ADDITIONAL INFORMATION : When you handle this product with low electro conductive materials, the material may highly be charged with electricity.

6. ACCIDENTAL RELEASE MEASURES

IN CASE OF SPILL OR OTHER RELEASE :

Use dust-proof mask to avoid inhaling dust. Collect spilled material with a vacuum cleaner. Dispose of waste material in a sanitary landfill.

ADDITIONAL INFORMATION :

Information for safe handling looks up chapter 7.

Information for disposal looks up chapter 13.

7. HANDLING AND STORAGE

HANDLING :

Avoid eye contact with the dust. Use of eyes protection such as chemical safety goggles is suggested. Avoid inhalation of dust. Use respiratory protection where local exhaust ventilation is not available. Take care to avoid breaking the packages.

STORAGE :

Keep containers tightly closed.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

EXPOSURE GUIDELINES ;

Ingredient name : Silicon dioxide

CAS No. : 7631-86-9

MAK-Values(1998) : Not Established

ACGIH(2006)TLV-TWA : Not Established (As precipitated Silica),

STEL : N/E

ENGINEERING CONTROLS :

Normal ventilation for standard manufacturing procedures is generally adequate. Local exhaust should be used when a large amount of the product is handled.

PERSONAL PROTECTION EQUIPMENT ;

Respiratory protection : Dust-proof mask and/or ventilation

Hand protection : Protective gloves

Skin protection : Protective gloves

Eye protection : Chemical safety goggles

Additional recommendations : Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area. After handling, Wash hands well with warm water and gargle your throat well.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR :	Colorless, odorless powder
BOILING POINT :	No Data
MELTING POINT :	No Data
FLASH POINT :	No Data
VAPOR PRESSURE(20deg.C) :	No Data
APPARENT DENSITY(Loose) :	0.2-0.8g/mL
SOLUBILITY(25deg.C) :	No Data
pH VALUE(20deg.C) :	No Data
PARTITION COEFFICIENT :	No Data

10. STABILITY AND REACTIVITY

STABILITY : Stable under ordinary conditions of use and storage.
CONDITION TO AVOID : Incompatibles.
INCOMPATIBILITY(MATERIAL TO AVOID) : Reacts with hydrogen fluoride strong acids, strong bases.
HAZARDOUS DECOMPOSITION PRODUCTS : Not Applicable

11. TOXICOLOGICAL INFORMATION

The information of this product is not found, so all data being on unbonded silica gel is undermentioned.

ACUTE TOXICITY : (Silica,Amorphous Fumed)
Oral(rat) : LD50 3,160mg/kg
Intravenous(rat) : LD50 15mg/kg
GENETIC STUDIES :
Inhalation(rat) : No Data
CARCINOGENIC CLASSIFICATION :
NTP : Not Established
IARC Monographs : Human Inadequate Evidence, Animal Inadequate Evidence, Group 3
OSHA Regulated : Not Established

12. ECOLOGICAL INFORMATION

BIODEGRADABILITY : No Data
BIOACCUMULATION : No Data
OTHER INFORMATION : No Data

13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT : Subject to local regulations.
PACKAGING TREATMENT : Subject to local regulations.
OTHER PRECAUTIONS : (RCRA etc.) : Dispose in accordance with all applicable regulations.

14. TRANSPORT INFORMATION

UN NUMBER : Not regulated
SHIPPING CLASS : Not Established

15. REGULATORY INFORMATION

COUNCIL DIRECTIVE 92/32/ EEC STATUS : Not classified as dangerous by EEC directive on harmful substances and by directive on harmful compounds.

INFORMATION ON THE WARNING LABEL

EEC Classification : Not classified
Hazard Symbol : Not classified
Risk Phrases : Not classified
Safety Phrases : Not classified
TSCA Inventory Status(USA) : All components of this product are listed on the TSCA Inventory.
SARA Section 302 : Not applicable
SARA Section 311,312 : Chronic Health Hazard
SARA Section 313 : Not applicable
Clean Air Act : Not applicable
WHMIS(CANADA) : Not determined

16. OTHER INFORMATION

No specific notes

The above information is believed to be correct to be the best of our knowledge and information but does not purport to be all inclusive and shall be used only as a guide. This product is intended to be used by expert persons having chemical knowledge and skill, at their own discretion and risk and Wako shall not be held liable for any damage resulting from handling or from contact with the above material.