SAFETY DATA SHEET

DISTRIBUTED BY: R.E. CARROLL, INC. 1570 NORTH OLDEN AVENUE EXT. EWING, NJ 08638-3204 USA 609-695-6211/800-257-9365 Orders@RECarroll.com

1. Identification of the substance or mixture and of the supplier

A. GHS product identifier: KONASIL TREATED (FUMED SILICA) K-D15, K-P15, K-P20 & K-T30

B. Recommended use of the chemical and restrictions on use

Recommended use: Coatings, adhesives and sealants **Restrictions on use:** Use for recommended use only.

C. Manufacturer

Company name: OCI Company Ltd.

Address:

Plant(Gunsan Factory): 82, Oehang-ro, Gunsan-si, Jeollabuk-do, Republic of Korea

Emergency phone number:

Precision Production Team: +82-63-460-6221 Quality Management Team: +82-63-460-6152

Respondent: Production Team - FS Production Department Manager

Fax: Not available

D. Supplier

Company name: OCI Company Ltd.

Address:

Plant(Gunsan Factory): 82, Oehang-ro, Gunsan-si, Jeollabuk-do, Republic of Korea

Emergency phone number:

Precision Production Team: +82-63-460-6221 Quality Management Team: +82-63-460-6152 **Respondent:** Quality Management Team - Manager

Fax: Not available

2. Hazards identification

A. GHS classification of the substance/mixture

Not classified according to OSHA 29 CFR 1910.1200

B. GHS label elements, including precautionary statements

Pictogram and symbol: Not applicable

Signal word: Not applicable **Hazard statements**: Not applicable

Precautionary statements
Precaution: Not applicable
Treatment: Not applicable
Storage: Not applicable
Disposal: Not applicable

C. Other hazard information not included in hazard classification (NFPA)

Health: 0 **Flammability:** 1

Reactivity: Not available

3. Composition/information on ingredients

Chemical Name	Common Name(Synonyms)	CAS number	EC number	Content (%)
Hydrophobic silicon dioxide	Siloxanes and Silicones di-Me, reaction products with silica	67762-90-7	Not available	100

4. First aid measures

A. Eye contact

- In case of contact with substance, immediately flush eyes with running water at least 20 minutes.

B. Skin contact

- In case of contact with substance, immediately flush skin with running water at least 20 minutes.
- Remove and isolate contaminated clothing and shoes.
- Wash contaminated clothing and shoes before reuse.
- Get immediate medical advice/attention.

C. Inhalation

- Specific medical treatment is urgent.
- Move victim to fresh air.
- Give artificial respiration if victim is not breathing.
- Administer oxygen if breathing is difficult.

D. Ingestion

- Do not let him/her eat anything, if unconscious.
- Get immediate medical advice/attention.

E. Indication of immediate medical attention and notes for physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

5. Fire fighting measures

A. Suitable (and unsuitable) extinguishing media

- Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.
- Use dry sand or earth to smother fire.

B. Specific hazards arising from the chemical

- Material may produce irritating and highly toxic gases from decomposition by heat and combustion during burning
- Some of these materials may burn, but none ignite readily.

C. Special protective equipment and precautions for fire-fighters

- Rescuers should wear appropriate protective equipment.
- Extinguish the area and maintain safety distance.
- Dike fire-control water for later disposal; do not scatter the material.
- Move containers from fire area if you can do it without risk.
- Fire involving Tanks; Extinguish at maximum distance or use unmanned fire fighting equipment.
- Fire involving Tanks; Cool containers with flooding quantities of water until well after fire is out.
- Fire involving Tanks; Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.
- Fire involving Tanks; Always stay away from tanks engulfed in fire.
- Fire involving Tanks; For large fires, use unmanned fire extinguishing equipment and let it recede if it is not possible.

6. Accidental release measures

A. Personal precautions, protective equipment and emergency procedures

- Wipe off any spills immediately and follow all protective precautions.
- Eliminate all ignition sources.
- Stop leak if you can do it without risk.
- Cover with plastic sheet to prevent spreading.
- Please note that materials and conditions to avoid.

B. Environmental precautions and protective procedures

- Prevent entry into waterways, sewers, basements or confined areas.

C. The methods of purification and removal

- Absorb spills with inert materials (for example, dry sand or soil), and put in chemical waste containers.
- Absorb liquid and rinse contaminated area with detergent and water.

7. Handling and storage

A. Precautions for safe handling

- Wash thoroughly after handling.
- Follow all MSDS/label precautions even after container is emptied because they may retain product residues.
- All equipment used when handling the product must be grounded.
- Please note that materials and conditions to avoid.
- Please work with reference to engineering controls and personal protective equipment.

B. Conditions for safe storage

- Empty drums should be completely drained, properly bunged, and promptly returned to a drum reconditioner, or properly disposed of.

8. Exposure controls/personal protection

A. Occupational Exposure limits

ACGIH regulation : Not applicable **Biological exposure index :** Not available

OSHA regulation:

OSHA PEL: 20 mppcf (80 mg/m³(%SiO₂)) (CASRN.112926-00-8)

NIOSH regulation:

TWA: 6 mg/m³ (CASRN. 7631-86-9)

Other: Not available

B. Appropriate engineering controls

- Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

C. Personal protective equipment

Respiratory protection

- If exposure concentration of the material exceeds the permitted exposure standards, wear adequate respiratory protection equipment with certificate of Korea Occupational Safety & Health Agency, by considering physicochemical properties of exposured particulate material.
- The following respiratory protection is recommended for particulate matter: If oxygen is lacking (<19.5%), wear a breathing mask or self-contained breathing apparatus.

Eye protection

- Wear breathable safety goggles to protect from particulate material causing eye irritation or other disorder.
- An eye wash unit and safety shower station should be available nearby work place.

Hand protection

- Wear appropriate protective gloves by considering physical and chemical properties of chemicals.

Body protection

- Wear appropriate protective clothing by considering physical and chemical properties of chemicals.

9. Physical and chemical properties

A. Appearance

Description: Solid Color: White
B. Odor: Odorless

C. Odor threshold: Not available

D. pH: Not available

E. Melting point/freezing point: Not available

F. Initial boiling point and boiling range: Not available

G. Flash point : $> 279 \, ^{\circ}$ C

H. Evaporation rate: Not available

I. Flammability (solid, gas): Not available

J. Upper/lower flammability or explosive limits: Not available

K. Vapor pressure: Not available L. Solubility (ies): Insoluble M. Vapor density: Not available N. Specific gravity: 1.8 g/cm³ (20 °C)

O. Partition coefficient: n-octanol/water : $\log K_{OW} = -8.92$

P. Auto ignition temperature: Not available
Q. Decomposition temperature: Not available

R. Viscosity: Not available S. Molecular weight: 60.09

10. Stability and reactivity

A. Chemical stability and Possibility of hazardous reactions:

- Fire may produce irritating and/or toxic gases.
- If inhaled, may be harmful.

B. Conditions to avoid:

- Heat, sparks or flames

C. Incompatible materials:

- Combustibles, Reducing material

D. Hazardous decomposition products:

- Corrosive and/or toxic gases
- During burning, pyrolysis or combustion may produce irritating and highly toxic gases.

11. Toxicological information

A. Information on the likely route of exposure: Not available

B. Information of Health Hazardous

Acute toxicity

Oral: Not available
Dermal: Not available
Inhalation: Not available

Skin corrosion/ irritation: Not available Serious eye damage/ irritation: Not available Respiratory sensitization: Not available

Skin sensitization: Not available Carcinogenicity: Not classified

IARC:

Group 3 (Silica, amorphous, CASRN 7631-86-9)

Mutagenicity: Not available

Reproductive toxicity: Not available

Specific target organ toxicity (single exposure): Not available Specific target organ toxicity (repeat exposure): Not available

Aspiration Hazard: Not available

12. Ecological information

A. Ecological toxicity

- Acute toxicity: Not available- Chronic toxicity: Not available

Fish: Not available crustacean: Not available Algae: Not available

B. Persistence and degradability

Persistence : $\log K_{OW} = -8.92$, $\log K_{OW} = 0.53$ (estimated)

Degradability: Not available **C. Bioaccumulative potential**

Bioaccumulation : BCF = 3.162 **Biodegradation :** Not available **D. Mobility in soil :** Not available

E. Other hazardous effect: Not available

F. Hazardous to the ozone layer: Not applicable

13. Disposal considerations

A. Disposal method

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

B. Disposal precaution

Consider the required attentions in accordance with waste treatment management regulation.

14. Transport information

A. UN Number: Not applicable

B. UN Proper shipping name : Not applicable **C. Transport Hazard class :** Not applicable

D. Packing group : Not applicableE. Marine pollutant : Not applicable

F. Special precautions

in case of fire: Not applicable in case of leakage: Not applicable

15. Regulatory information

① U.S.A Regulatory information

A. U.S.A management information (OSHA Regulation): Not regulated

B. U.S.A management information (CERCLA Regulation): Not regulated

C. U.S.A management information (EPCRA 302 Regulation): Not regulated

D. U.S.A management information (EPCRA 304 Regulation): Not regulated

E. U.S.A management information (EPCRA 313 Regulation): Not regulated

F. U.S.A management information - Section 8(b) Inventory (TSCA) : Present [XU] (ACTIVE)

2 Foreign Regulatory Information

Registration inventory

China: on IECSC (Inventory of Existing Chemical Substances in China)

Canada: on DSL (Supplement to Canada Gazette, Part 1)

Australia: on AIIC (Australian Inventory of Industrial Chemicals)
Republic of Korea: on KECL (Korean Government Gazette Notice)

Philippine: on PICCS (Philippines Inventory of Chemicals and Chemical Substances)

Taiwan: on TCSI (Taiwan Government Gazette)

New Zealand: on NZIOC (New Zealand Inventory of Chemicals)

Mexico: on INSQ (National Inventory of Chemical Substances in Mexico)

External information

Substance of Roterdame Protocol: Not regulated Substance of Stockholme Protocol: Not regulated Substance of Montreal Protocol: Not regulated

16. Other information

A. Information source and references

- K-P15, K-D15, K-P20 MSDS provided by OCI Company Ltd.
- Ecological Structure Activity Relationships (RCOSAR)

- Quantitative Structure Activity Relation (QSAR)
- American Conference of Governmental Industrial Hygienists TLVs and BEIs.
- NIOSH Pocket Guide; http://www.cdc.gov/niosh/npg/npgdcas.html
- National Toxicology Program; http://ntp.niehs.nih.gov/results/dbsearch/
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; http://monographs.iarc.fr
- Korea Occupational Health & Safety Agency; http://www.kosha.or.kr
- National Chemicals Information System; http://ncis.nier.go.kr/main.do
- Ministry of Public Safety and Security-Korea dangerous material inventory management system; http://hazmat.mpss.kfi.or.kr/index.do
- Waste Control Act enforcement regulation attached [1]
- B. Issuing date: 21 Mar, 2018 C. Revision number and date revision number: Rev.(01)

date of the latest revision: 26. May. 2021

D. Others

- •This SDS is authored in pursuant to the U.S. OSHA 29 CFR 1910.1200.
- •The content is based on the latest information and knowledge that we currently possess.
- •This SDS was authored to aid buyer, processor or any other third person who handles the chemical of subject in the SDS; additionally, it does not warrant suitability of the chemical for special purposes or the commercial use of statements that approves the use of it in combination with other chemicals as well as technical or legal liabilities.
- •The content of the SDS may vary depending on the country or the region and may not coincide with the actual regulations. Therefore, the buyer or the processor of the chemical is responsible for observing responsible government's or the region's regulations.