# 물질안전보건자료
# (Material Safety Data Sheet)

| product name | HANSAN Standard Silica Series (HS-3, HS-5, HS-6, HS-9, HS-6-250) |
|---|---|

## 1. Information on chemical products and companies

| | |
|---|---|
| A. product name | HANSAN Standard Silica Series (HS-3, HS-5, HS-6, HS-9, HS-6-250) |
| B. Recommended use of the product and restrictions on use | |
| Recommended use of the product | Cosmetic Ingredient (Texturizing agent, Sebum Control, Matte Finish) |
| Restrictions on use of the product | |
| C. Supplier information (in the case of imported products, provide information on domestic suppliers that can be contacted urgently) | |
| Company Name | HANSAN |
| address | 34-74, Tancheon Industrial Complex-gil, Tancheon-myeon, Gongju-si, Chungnam |
| Emergency phone number | no data |

## 2. Hazards and dangers

| | |
|---|---|
| A. Classification of hazards and risks | |
| B. Warning label items including precautionary statements | |
| Pictogram | |
| Hazard statements | |
| Precautionary Statement | |
| prevention | Do not breathe P260 (dust/fume/gas/mist/vapours/spray). |
| Response | P314 Get medical advice/attention if you feel unwell. |
| Storage | Store in a cool, dry place |
| Disposal | It should comply with local, state, or national environmental regulations when it is disposed of. |
| C. Other hazards and risks not included in the criteria for classification of hazards and risks (NFPA) | |
| Health | 1 |
| fire | 0 |
| Reactive | 0 |

## 3. Name and content of ingredients

| | |
|---|---|
| Substance name | HANSAN Standard Silica Series (HS-3, HS-5, HS-6, HS-9, HS-6-250) |
| Synonyms (common name) | SILICA |
| CAS number | 7631-86-9 |
| content(%) | 100% |

## 4. First aid measures

| | |
|---|---|
| A. When it gets into your eyes | Get emergency medical attention |
| | In case of contact with material, immediately flush skin and eyes with running water for at least 20 minutes. |
| B. When it comes into contact with the skin | If you feel unwell, seek medical advice/attention. |
| | Remove contaminated clothing and shoes and isolate contaminated area |
| | In case of contact with material, immediately flush skin and eyes with running water for at least 20 minutes.<br>Prevent spread of contaminated area in case of minor skin contact |
| C. When inhaled | If you feel unwell, seek medical advice/attention. |
| | Move to fresh air |
| | If not breathing, give artificial respiration. |
| | If breathing is difficult, give oxygen |
| | Keep it warm and calm |
| D. Ingestion | If you feel unwell, seek medical advice/attention. |

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| E. Other doctor's notes | Make sure medical personnel are aware of the substance and take protective measures. |

## 5. How to deal with explosions and fires

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|---|---|
| A. Suitable (inappropriate) extinguishing agent | Use alcohol foam, carbon dioxide or water spray for extinguishing involving this material. |
| | Use dry sand or soil for smothering |
| B. Specific hazards arising from chemicals | Can be decomposed at high temperatures to produce toxic gases |
| | Container may explode when heated |
| | Some can burn but do not ignite easily |
| | Non-flammable, the material itself does not burn, but it may decompose when heated to generate corrosive/toxic fumes. |
| C. Protective equipment and precautions to be worn when fighting fire | Extinguish the area and keep it at a safe distance. |
| | Please note that it may melt and be transported. |
| | Dig a ditch for the disposal of fire extinguishing water and keep it from scattering the material. |
| | Move containers from fire area if it is not dangerous |
| | In case of tank fire, extinguish from maximum distance or use unmanned fire extinguishing equipment. |
| | In case of a tank fire, cool containers with plenty of water even after extinguishing has extinguished. |
| | In case of a tank fire, if there is a sound from the pressure relief device or the tank discolors, withdraw immediately. |
| | In the event of a tank fire, get out of the tank in flames. |
| | In case of a tank fire, in case of a large fire, use unmanned fire extinguishing equipment and, if not possible, leave to burn. |

## 6. How to deal with a leakage accident

| | |
|---|---|
| A. Measures and protective equipment necessary to protect the human body | Do not breathe (dust/fume/gas/mist/vapours/spray). |
| | Wipe up spills immediately and follow precautions in the protective equipment section. |
| | Eliminate all sources of ignition |
| | Stop leak if it is not dangerous |
| | Do not touch damaged containers or spills without wearing appropriate protective clothing. |
| | Cover with plastic sheet to prevent spread |
| | Be aware of substances and conditions to avoid |
| B. Measures necessary to protect the environment | Prevent entry into waterways, sewers, basements and confined spaces |
| C. How to cleanse or remove | Absorb the spill with an inert material (eg dry sand or dirt) and place in a chemical waste container. |
| | Absorb liquid and flush contaminated area with detergent and water. |

## 7. Handling and storage

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|---|---|
| A. Safe handling tips | Do not breathe (dust/fume/gas/mist/vapours/spray). |
| | Follow all MSDS/label precautions as product debris may remain after the container is emptied. |
| | Be aware of substances and conditions to avoid |
| | Work with reference to engineering controls and personal protective equipment |
| B. Safe storage method | Empty drums should be completely drained and properly closed and immediately returned to drum regulator or placed properly. |

## 8. Exposure prevention and personal protective equipment

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|---|---|
| A. Exposure standards for chemical substances, biological exposure standards, etc. | |
| Domestic regulations | TWA-10mg/m3 silicon oxide (amorphous diatomaceous earth) |
| ACGIH regulations | no data |
| Biological exposure limits | no data |
| Other exposure standards | no data |
| B. Appropriate engineering controls | Use process isolation, local exhaust, or other engineering controls that control air levels below exposure limits. |
| C. Personal protective equipment | |
| Respiratory protection | Silicon oxide (amorphous diatomaceous earth) |
| | Wear respiratory protective equipment certified by the Korea Occupational Safety and Health Agency that matches the physicochemical properties of the exposed particulate |

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|---|---|
| | If the exposure concentration is lower than 100mg/m3, wear a respirator fitted with an appropriate type of filter. |
| | If the exposure concentration is lower than 250mg/m3, wear a loose-fitting hood/helmet-type electric respirator or continuous flow dust mask with an appropriate type of filter. |
| | If the exposure concentration is lower than 500mg/m3, wear a full-face type or motorized type or air-supplied type continuous flow type/pressure-requiring type half- |
| | If the exposure concentration is lower than 10000mg/m3, wear a full face type, helmet/hood type, pressure-requiring air mask with an appropriate filter. |
| | If the exposure concentration is lower than 100000mg/m3, wear a self-air supply (SCBA) or pressure-required self-air supply (SCBA) respirator equipped with an |
| Eye protection | Wear breathable goggles to protect your eyes from particulate matter that may cause eye irritation or other health hazards. |
| | Install emergency washing facilities (shower type) and face-wash facilities in a location where workers can easily access. |
| Hand protection | Wear appropriate protective gloves in consideration of the physical and chemical properties of chemical substances. |
| Body protection | Wear appropriate protective clothing in consideration of the physical and chemical properties of the chemical. |

## 9. Physical and chemical properties

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|---|---|
| A. Exterior | |
| Appearance | solid |
| color | White |
| B. odor | Odorless |
| C. Odor threshold | no data |
| D. pH | 6.5-7.5 (4% dispersion) |
| E. Melting point/freezing point | > 1600 ℃ |
| F. Initial boiling point and boiling range | > 2230 ℃ |
| G. flash point | no data |
| H. Evaporation rate | no data |
| I.Flammability (solid, gas) | no data |
| J. Upper/lower flammability or explosive limits | -/- |
| K. Vapor pressure | no data |
| L. Solubility | no data |
| M. Vapor density | no data |
| N. Specific Gravity | 2.19-2.66 |
| O. n-octanol/water partition coefficient | no data |
| P. Auto-ignition temperature | no data |
| Q. Decomposition temperature | no data |
| R. Viscosity | no data |
| S. Molecular Weight | 60.09 |

## 10. Safety and Reactivity

| | |
|---|---|
| A. Chemical stability and potential for hazardous reactions | Can be decomposed at high temperatures to produce toxic gases |
| | Container may explode when heated |
| | Some can burn but do not ignite easily |
| | Non-flammable, the material itself does not burn, but it may decompose when heated to generate corrosive/toxic fumes. |
| B. Conditions to avoid | Ignition sources such as heat, sparks, and flames |
| C. Substances to avoid | Combustible material, reducing material |
| D. Hazardous substances generated during decomposition | Corrosive/toxic fumes |
| | Irritating, corrosive and toxic gases |

## 11. Toxicological information

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|---|---|
| A. Information on the likely routes of exposure | no data |
| B. Health Hazard Information | |
| Acute toxicity | |
| oral- | LD50 5000 mg/kg Rat |
| Transdermal | LD50> 2000 ㎎/kg Rabbit |
| inhale | Dust LC50> 5.2 ㎎/ℓ 4 hr Rat |
| Skin corrosion or irritation | eye irritation |
| Severe eye damage or irritation | no data |

| | |
|---|---|
| Respiratory sensitization | - |
| Skin sensitization | No skin sensitization |
| Carcinogenicity | |
| Industrial Safety and Health Act | no data |
| Ministry of Employment and Labor Notification | no data |
| IARC | 3 |
| OSHA | no data |
| ACGIH | no data |
| NTP | no data |
| EU CLP | no data |
| Germ cell mutagenicity | no data |
| Reproductive toxicity | no data |
| Specific target organ toxicity (single exposure) | no data |
| Specific target organ toxicity (repeated exposure) | Increased number of red and white blood cells, neutrophils. Swelling of the lungs and enlarged mediastinal lymph nodes. Increased lung weight and collagen content in the |
| Aspiration hazard | no data |
| Other adverse effects | no data |

## 12. Environmental impact

| | |
|---|---|
| A. Ecotoxicity | |
| Fish | LC50 5000 ㎎/ℓ 96 hr |
| shellfish | LC50 7600 ㎎/ℓ 48 hr |
| Birds | EC50 440 ㎎/ℓ 72 hr |
| B. Persistence and degradability | |
| Persistence | log Kow 0.53 |
| Degradability | no data |
| C. Bioaccumulative | |
| Bioaccumulation | BCF 3.162 |
| Biodegradable | no data |
| D. Soil mobility | no data |
| E. Other adverse effects | no data |

## 13. Precautions for disposal

| | |
|---|---|
| A. Disposal method | If specified in the Waste Management Act, dispose of contents and containers according to regulations. |
| B. Caution for disposal | Dispose of the contents container (according to the contents specified in the relevant laws and regulations). |

## 14. Information required for transport

| | |
|---|---|
| A. UN No. | There is no information on the classification of dangerous substances for transport |
| B. Proper shipping name | Not applicable |
| C. Transport hazard class | Not applicable |
| D. Container grade | Not applicable |
| E. Marine pollutant | no data |
| F. Special safety measures that the user needs or needs to know about transport or means of transport | |
| Emergency measures in case of fire | Not applicable |
| Emergency measures in case of spill | Not applicable |

## 15. Status of legal regulations

| | |
|---|---|
| A. Regulation by the Industrial Safety and Health Act | Work environment measurement target material (measurement cycle: 6 months)<br>Substances subject to special health examination (diagnosis cycle: 24 months)<br>Substances for setting exposure limits |
| B. Regulation by the Chemical Substance Control Act | Not applicable |
| C. Regulation by the Dangerous Goods Safety Management Act | Not applicable |
| D. Regulation by the Waste Management Act | Designated waste |
| E. Regulations by other domestic and foreign laws | |

| | |
|---|---|
| Domestic regulation | |
| Persistent Organic Pollutant Management Act | Not applicable |
| Overseas regulation | |
| US Management Information (OSHA Regulation) | Not applicable |
| US management information (CERCLA regulations) | Not applicable |
| US Management Information (EPCRA 302 Regulation) | Not applicable |
| US Management Information (EPCRA 304 Regulation) | Not applicable |
| U.S. Administrative Information (EPCRA 313 Regulation) | Not applicable |
| US Management Information (Rotterdam Convention Substances) | Not applicable |
| US Management Information (Stockholm Convention Substance) | Not applicable |
| US Management Information (Montreal Protocol Substance) | Not applicable |
| EU classification information (confirmed classification result) | Not applicable |
| EU classification information (danger phrases) | Not applicable |
| EU classification information (safety statement) | Not applicable |

## 16. Other notes

A. Source of data

TOMES: HAZARDTEXT (oral)

(IUCLID) (dermal)

(IUCLID) (inhalation)

(IUCLID) (skin corrosion or irritation)

(SIDS) (Skin Sensitization)

IUCLID (specific target organ toxicity (repeated exposure))

IUCLID (fish)

IUCLID (crustacean)

IUCLID (bird)

| | |
|---|---|
| B. Initial writing date | 2026-01-13 |
| C. Number of revisions and date of last revision | |
| Number of revisions | 3times |
| Last revision date | 0 |

D. Other