Samchun Chemicals

Material Safety Data Sheet

Silicagel blue, medium 5-10mesh

Section 1 – PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifier Silicagel blue, medium 5-10mesh; Silicon dioxide

2. Recommended Use & Uses advised against Uses for Laboratory and R&D only

3. Information of Supplier

SAMCHUN PURE CHEMICAL CO.,LTD
ADDRESS; (Mogok-dong) 117, Sandan-ro 16Beon-gil, Pyeongtaek-si, Gyeonggi-do, Korea
Emergency Phone; 82-31-668-0700/3
Department; Safety & Environment dep.
Web site; http://www.samchun.com

Section 2 – HAZARDS and DANGER IDENTIFICATION

1.GHS Classification· Identification Serious Eye Damage/Eye Irritation Category2

2. Label and Mark including Precautionary Statement

◦**Label elements**



◦**Signal word** Warning

◦**Hazard ·Danger statement** H319 Causes serious eye irritation

◦**Precautionary statement**

Precaution P264 Wash ... thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection

Measures 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 advice/attention.

Storage N/A

Dispose N/A

3. Other Hazard-Risk which are not included in the classification criteria

NFPA index(0~4steps) : Health=1, Fire=0, Reaction=0

Section 3 – COMPOSITION AND INFORMATION ON INGREDIENTS

Chemical Name	Other Name	CAS No.	Content (%)
Silicagel blue	Silicon dioxide	112926-00-8	100

Section 4 – FIRST AID MEASURES

1. Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15minutes, Immediate medical attention is required.

2. Skin Contact Take off contaminated cloths and shoes immediately, wash with plenty Of water and soap for at least 15minutes.

3. Inhalation Move to fresh air immediately, if breathing is difficult, induce artificial respiration and immediate medical treatment is required.

4. Ingestion Do not induce vomiting and Call a physician immediately.

5. Immediate medical attention and Notes for physician Let physician aware material and take protection measures.

Section 5 – FIRE-FIGHT MEASURES

1. Suitable extinguish media Dry chemical, water, carbon dioxide, foam extinguishing agents
Inappropriate Extinguishing Media: Not available

2. Special hazards arising from the substance Thermal decomposition products: Crystalline silica

3. Special protective equipment and Precautions for fire-fighters Move a container away from fire place, available not being dangerous
Cool the container with water spray for long time, after extinguishing
No direct contact with material by water. In case of big fire, mass watering in fine spray and decrease vapor. Spray in safety distance, avoid inhaling of material-itself and burnings, position in opposite wind and escape low area.

Section 6 – ACCIDENTIAL RELEASE MEASURES

1.Personal precautions and Emergency procedures Don't touch leakages and avoid inhale and skin contact, ventilate and use air respiratory in closed room, remove ignition source.

2. Environmental precautions Minimize leak/spill, collect and keep leak/spill in container

3. Methods and material for containment and cleaning up Remove residue with high-efficient cleaner

Section 7 – HANDING AND STORAGE

1. Precautions for safe Handling Skin contact, inhalation of vapors and prevent intrusion to the eye, all containers will be grounded. Minimize dust generation and accumulation.

2. Conditions for safe storage
Keep container tightly closed in a dry, cool and well-ventilated place.
Keep away from incompatible materials.
Store with acid.
Avoid contact with moisture.
Separate from magnesium

Section 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

1.Occupational exposure limit, biological exposure limit
National law of Safety management of
Occupational Health and Safety Act
Silicon dioxide, amorphous (silica, amorphous)
-TWA: 10 mg / m3
-STEL:
10 mg / ㎥ ACGIH TWA (inhalation) (no asbestos, less than 1% of crystalline silica)
3mg / ㎥ ACGIH TWA (respirable fraction) (no asbestos, less than 1% of crystalline silica)
6mg / ㎥ NIOSH recommended TWA 10 hours
4mg / ㎥ DFG MAK (Inhalable dust fraction)

2. Appropriate Engineering controls Check conditions of exposure criteria, operation local ventilation during work

3. Personal protective equipment

◦**Respiratory protection** Because it is concerned about the harmfulness of the human body due to chemical substances, it should be worn with respiratory protective equipment in combination with dust mask or dust filter in consideration of physical and chemical characteristics during handling.
Respiratory protection should be certified by the Health and Safety Authority.
If this affects the life or health concerns or other unknown concentrations, depending on the work environment should wear supplied-air respirator, air respirator

◦**Eye-protection** Wear safety goggles for handling chemicals as they may cause human health hazards due to chemicals.
Install eye wash facilities and emergency eyewash stations near chemical handling

	sites.
◦**Hand protection**	Wear safety gloves for handling chemicals as they may cause human health hazards.
◦**Skin and body proticion**	Wear chemical protective clothing when handling, as it is likely to harm human health due to chemicals

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

1.Physical state and color	Solid(Blue)	**2.Odor**	Odorless
3.threshold	N/A	**4. pH**	5.5-8.0 (10% aq.sol.)
5.Melting/Freezing point	> 1600℃	**6.Boiling point/range**	2230℃
7. Flashing point	N/A	**8. Evaporation speed**	N/A
9. Flammability(solid,gas)	N/A	**10. Flash or Explosion limit upper / lower**	N/A
11. Vapor pressure	N/A	**12. Solubility**	Insoluble
13. Vapor density	N/A	**14.Gravity**	2.19~2.66
15. n-octanol-water Partition coefficient	N/A	**16. Self ignition temp(℃)**	N/A
17. Cracking temp(℃)	N/A	**18. Viscosity**	N/A
19. Molecular Weight	60.08		

Section 10 – STABILITY AND REACTIVITY

1.Chemical stability and Possibility of Hazardous Reactions	Stable under normal temp. and pressure
2. Conditions to Avoid	Avoid contact with prohibited substances. To suppress the generation of dust
3. Incompatible Materials	Halogen, acids, combustible materials, metals, metal salts, oxidants
4. Hazardous Decomposition Products	Thermal decomposition products: crystalline silica

Section 11 – TOXICOLOGICAL INFORMAION

1. Information on the likely routes of exposure.

N/A

2. Health hazard information

◦**Acute toxic**	Oral : LD50 3160 mg/kg Rat Skin : LD50 > 2000 mg/kg Rabbit Inhalation : Dust LC50> 2.2 mg/l 1hr Rat
◦**Serious skin corrosive / irritation**	May cause skin irritation
◦**Serious eye damage / irritation**	Causes eye irritation
◦**Respiratory sensitization**	Respiratory tract irritation
◦**Skin sensitization**	N/A
◦ **Carcinogenicity**	IARC – Group3 Chemicals not classified as human carcinogens due to insufficient data
◦ **Germ cell Mutagenicity**	N/A
◦ **Reproductive toxic**	N/A
◦**Specific target organ toxicity (single exposure)**	N/A
◦**Specific target organ toxicity (repeated exposure)**	N/A
◦**Aspiration hazard**	N/A

Section 12 – ECOLOGICAL INFORMATION

1.Acquatic and Terrestrial eco toxicity	Fish toxicity : LC50 5000 ㎎/ℓ 96 hr Invertebrate toxicity : LC50 7600 ㎎/ℓ 48 hr Sea algae : EC50 440 ㎎/ℓ 72 hr
2.Persistence and degradability	Persistence : log Kow 0.53 Degradability : N/A
3.Bioaccumulative potential	Concentrations : BCF 3.162 Bioaccumulative : N/A
4.Mobility in soil	N/A
5.Other adverse effects	N/A

Section 13 – Disposable considerations

1.Waste methods	Dispose in accordance with local regulations.
2.Waste warning	Isolate waste away from prohibitive mixture substance.

Section 14 – TRANSPORT INFORMATION

1. UN No.	Non-described
2.Proper shipping Name	Non-described
3.Hazard class	Non-described
4.Packing group	Non-described
5.Marine pollutnat	N/A
6.Particular safety Measures for transportation	Non-described

Section 15 – REGULATARY INFORMATION

1.Occupation safety and health acts	Standard material of exposure
2. Chemical Substances Control Act	Non-described
3. National law of Safety management of hazardous material	Non-described
4.National law of management of Wastes	Designated Waste
5.Other domestic and foreign law	Non-described

Section 16 – OTHER INFORMATION

1. Material source	A chemical information MSDS Safety and Health Agency National Institute of Environmental Research Chemical Information Systems Korea Industrial Technology National Fire Hazardous Materials Information System
1. The 1st edition	2002.07.30
2. Revision and The final revision	7 / 2019.01.03

. Other references

*** The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.**