

Chemical Safety Data Sheet (MSDS)

SILICIC ACID

Revision Date: 2025-12-20Revision Number: 1

SECTION 1: Identification of the substance/mixture and of the company

Product identifier

Item	Details
Product name	SILICIC ACID
CBnumber	CB2199391
CAS Number	1343-98-2
EINECS Number	215-683-2
Synonyms	Hydrated Silica

Relevant identified uses of the substance or mixture and uses advised against

Category	Details
Relevant identified uses	For R&D use only. Not for medicinal, household or other use.
Uses advised against	None

Company Identification

Item	Details
Company Name	Shaanxi Agrinorm Import And Export Co., Ltd.
Address	Room 1801, Unit 4, Building 1, Shangfu North District, Yicui Garden, No. 31, Zhangba 2nd Road, Xi'an High-Tech Zone, Xi'an, Shaanxi, China
Telephone	+86-29-81131922
Email	info@agrinorm.com.cn
WhatsApp	+86 18009239676
Official Websites	https://www.agrinormgroup.com ; https://agrinorm.en.alibaba.com

SECTION 2: Hazards identification

GHS Label elements, including precautionary statements

Category	Details
GHS Symbol	None
GHS Classification	Specific Target Organ Toxicity - Repeated Exposure (Category 2)
Precautionary	P260: Do not breathe dust/fume/gas/mist/vapours/spray.P314: Get medical

Category	Details
statements	advice/attention if you feel unwell.
Hazard statements	H373: May cause damage to the respiratory system through prolonged or repeated exposure.

SECTION 3: Composition/information on ingredients

Substance

Item	Details
Product name	SILICIC ACID
Synonyms	Hydrated Silica
CAS Number	1343-98-2
EC Number	215-683-2
Molecular Formula (MF)	H ₄ O ₄ Si
Molecular Weight (MW)	96.13
Purity	≥98%
Harmful Impurities	None

SECTION 4: First aid measures

Description of first aid measures

Exposure Route	First Aid Actions
If inhaled	Move the person to fresh air. If not breathing, perform artificial respiration immediately and seek medical attention.
In case of skin contact	Wash the affected area thoroughly with soap and plenty of running water for at least 15 minutes.
In case of eye contact	Flush eyes continuously with clean water for 15-20 minutes, keeping eyelids open. Seek medical advice if irritation persists.
If swallowed	Do not induce vomiting unless directed by a physician. Rinse mouth with water. If the person is unconscious, do not give anything by mouth and seek emergency medical help immediately.

Most important symptoms and effects, both acute and delayed

• The most important known symptoms and effects are described in the labelling (see Section 2) and/or in Section 11.

Indication of any immediate medical attention and special treatment needed

• Consult a physician promptly. Provide this MSDS to the attending physician for reference.

SECTION 5: Firefighting measures

Extinguishing media

Category	Details
Suitable extinguishing media	Water spray, alcohol-resistant foam, dry chemical, or carbon dioxide (CO ₂).
Special hazards arising from the substance/mixture	Silicon oxides may be released under fire conditions.

Advice for firefighters

- Wear self-contained breathing apparatus (SCBA) and full protective clothing if necessary.
- Cool containers with water spray to prevent pressure buildup.

Further information

NFPA 704 Rating	Details
HEALTH (Blue)	0 - Poses no health hazard under normal use conditions.
FIRE (Red)	0 - Non-combustible; will not burn under typical fire conditions (e.g., exposure to 820 °C / 1 500 °F for 5 minutes).
REACTIVITY (Yellow)	0 - Normally stable, even under fire exposure; non-reactive with water.
SPECIFIC HAZARD (White)	None

SECTION 6: Accidental release measures

• Personal precautions, protective equipment and emergency procedures

- Avoid dust formation and inhalation of dust/vapours.
- Wear appropriate personal protective equipment (see Section 8).

• Environmental precautions

- No special environmental precautions required.

• Methods and materials for containment and cleaning up

- Sweep up and shovel the spilled material into suitable, tightly closed containers for disposal.

• Reference to other sections

- For disposal, refer to Section 13.

SECTION 7: Handling and storage

• Precautions for safe handling

- Provide appropriate exhaust ventilation at work areas where dust is generated.
- Follow precautionary statements in Section 2.
- Avoid contact with incompatible materials (see Section 10).

• Conditions for safe storage, including any incompatibilities

- Store in a cool, dry, and well-ventilated area.
- Keep containers tightly closed when not in use.

-Do not store with strong acids or hydrogen fluoride (see Section 10).

• **Specific end use(s)**

-Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

Control parameters

Hazard composition and occupational exposure limits

Does not contain substances with established occupational exposure limits.

Exposure controls

Category	Details
Appropriate engineering controls	Implement general industrial hygiene practices; ensure adequate ventilation to minimize dust accumulation. -Eye/face protection: Use safety goggles or face shield tested and approved to NIOSH (US) or EN 166 (EU) standards. -Skin protection: Wear nitrile rubber gloves (minimum layer thickness: 0.11 mm, breakthrough time: ≥480 min) complying with Regulation (EU) 2016/425 and EN 374:2016. Inspect gloves before use; remove properly to avoid cross-contamination. Dispose of contaminated gloves per regulations.
Personal protective equipment (PPE)	Wash hands thoroughly after handling. -Body protection: Wear a lab coat or chemical-resistant protective suit suitable for dust exposure. -Respiratory protection: Not required under normal use. For nuisance dust levels, use N95 (US) or P1 (EN 143) dust masks tested and approved to NIOSH (US) or CEN (EU) standards.
Control of environmental exposure	No special environmental precautions required.

Note: For use in solutions or mixed with other substances, consult the glove supplier for CE-approved options.

SECTION 9: Physical and chemical properties

Information on basic physicochemical properties

Property	Details
Appearance	White, odorless, amorphous powder
Odour	No data available
Odour Threshold	No data available
pH (33 g/L, 25 °C)	2.5 - 3.5
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available

Property	Details
Flash point	Not applicable (non-combustible)
Evaporation rate	No data available
Flammability (solid, gas)	No data available (non-combustible)
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient (n-octanol/water)	No data available
Autoignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

Other safety information

Key physicochemical properties not fully tested; above data are typical values.

SECTION 10: Stability and reactivity

Reactivity: No data available.

Chemical stability: Stable under recommended storage and handling conditions (see Section 7).

Possibility of hazardous reactions: No data available.

Conditions to avoid: No data available.

Incompatible materials: Strong acids

Hydrogen fluoride: Hazardous decomposition products

Under fire conditions: Silicon oxides

Other decomposition products: No data available
In case of fire, refer to Section 5.

SECTION 11: Toxicological information

Information on toxicological effects

Category	Details
Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/eye irritation	No data available
Respiratory or skin sensitisation	No data available
Germ cell mutagenicity	No data available
Carcinogenicity	IARC: No component present at $\geq 0.1\%$ is classified as a probable, possible, or confirmed human carcinogen.
Reproductive toxicity	No data available
Specific target organ toxicity - single exposure	No data available

Category	Details
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
	RTECS Number: VV8853000
Additional Information	Note: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

Toxicity: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

Results of PBT and vPvB assessment: This substance/mixture contains no components considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of $\geq 0.1\%$.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Waste treatment methods

Category	Details
Product	Offer surplus and non-recyclable material to a licensed waste disposal company. Comply with local, regional, and national regulations.
Contaminated packaging	Dispose of as unused product (follow the same disposal requirements as the product).

SECTION 14: Transport information

Item	ADR/RID	IMDG	IATA
UN number	-	-	-
UN proper shipping name	Not dangerous goods	Not dangerous goods	Not dangerous goods
Transport hazard class(es)	-	-	-
Packaging group	-	-	-
Environmental hazards	No	No (Marine pollutant)	No
Special precautions for user	No data available	No data available	No data available

Additional note: UN Class: Not regulated.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance

or mixture

Regulation/Inventory	Status & Details
Regulations on the Safety Management of Hazardous Chemicals (China)	China Catalog of Hazardous Chemicals (2015): Not Listed. Not classified as explosive, toxic, or other specially regulated chemicals. Website: https://www.mem.gov.cn/
Measures for Environmental Management of New Chemical Substances (China)	Chinese Chemical Inventory of Existing Chemical Substances (China IECSC): Listed. Website: https://www.mee.gov.cn/
European Inventory of Existing Commercial Chemical Substances (EINECS)	Listed. Website: https://echa.europa.eu/
Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Listed. Website: https://emb.gov.ph/
United States Toxic Substances Control Act (TSCA) Inventory	Listed. Website: https://www.epa.gov/
Vietnam National Chemical Inventory	Listed. Website: https://chemicaldata.gov.vn/
Korea Existing Chemicals List (KECL)	Listed. Website: http://ncis.nier.go.kr
EC Inventory	Listed.
New Zealand Inventory of Chemicals (NZIoC)	Listed. Website: https://www.epa.govt.nz/

SECTION 16: Other information

Abbreviations and acronyms

Abbreviation	Full Name
CAS	Chemical Abstracts Service
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transportation Association
TWA	Time Weighted Average
STEL	Short Term Exposure Limit
LC ₅₀	Lethal Concentration 50%
LD ₅₀	Lethal Dose 50%
EC ₅₀	Effective Concentration 50%

References

CAMEO Chemicals Website: <http://cameochemicals.noaa.gov/search/simple>

ChemIDplus. Website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>

ECHA - European Chemicals Agency. Website: <https://echa.europa.eu/>

eChemPortal - The Global Portal to Information on Chemical Substances by OECD.

Website: http://www.echemportal.org/echemportal/index?pagelD=0&request_locale=en

ERG - Emergency Response Guidebook by U.S. Department of Transportation.

Website: <http://www.phmsa.dot.gov/hazmat/library/erg>

Germany GESTIS-database on hazard substances.

Website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>

HSDB - Hazardous Substances Data Bank. Website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>

IARC - International Agency for Research on Cancer. Website: <http://www.iarc.fr/>

IPCS - The International Chemical Safety Cards (ICSC).

Website: <http://www.ilo.org/dyn/icsc/showcard.home>

Sigma-Aldrich. Website: <https://www.sigmaaldrich.com/>

Disclaimer

- The information in this MSDS is only applicable to the specified product. Unless otherwise stated, it does not apply to mixtures of this product with other substances.
 - This MSDS provides safety information solely for users who have received appropriate professional training.
 - Users must make independent judgments on the applicability of this document.
 - The authors of this MSDS shall not be liable for any harm caused by the improper use of this document.
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