

SAFETY DATA SHEET



Section 1: COMPANY AND PRODUCT IDENTIFICATION

Company Name	Penguin Pottery LLC
Address	193 A St, Unit 42, Wilder, VT 05088
Emergency Contact	IN CASE OF EMERGENCY PLEASE CONTACT YOUR REGIONAL / LOCAL POISON CONTROL CENTER. 1-800-222-1222
Phone	603-200-3042
Email	support@penguinpottery.com
Website	www.penguinpottery.com
Product name	Sodium Silicate - 16 oz
Product use/description	Used primarily as a surface texturing agent and as a deflocculant to thin out ceramic casting slip
Product Identifier Codes	PP-CH-SODSIL-16OZ
Restrictions on use	Non-Cosmetic Use: Not for ingestion or use in cosmetics. Food-Contact Limitation: Do not use on food-contact surfaces unless it has been fired to maturity. Form Limitation: Intended for use only in liquid form as supplied.
Regulatory Basis	OSHA Hazard Communication Standard (29 CFR 1910.1200), GHS classification

Section 2: HAZARDS IDENTIFICATION

Classification	Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200) and GHS Rev. 3. Serious eye irritation, Category 2A (H319). Hazard not otherwise classified (HNOC): acute toxicity, oral, Category 5 - may be harmful if swallowed. No other GHS hazard class applies. This product has been evaluated under the Labeling of Hazardous Art Materials Act (LHAMA, 16 CFR 1500) in accordance with ASTM D-4236 by a board-certified toxicologist, who determined that it requires no chronic hazard labeling.
Hazard statement	H319: Causes serious eye irritation. May be harmful if swallowed (acute toxicity, oral, Category 5 - hazard not otherwise classified).
Signal word	Warning
Precautionary statement	P264: Wash thoroughly after handling. P280: Wear eye and face protection. 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 or attention. P301+P312: IF SWALLOWED - call a poison center or get medical attention if you feel unwell.
Important Usage Instruction	This product is intended for use only in liquid form as supplied. If product begins to dry out, reconstitute with water before use. As a matter of good work practice, do not process dried residue into airborne dust.
Pictogram(s) by GHS	GHS07 (Exclamation Mark) The GHS07 pictogram consists of a red diamond-shaped border with a black exclamation mark in the center.
Other Hazards	Alkaline solution (pH 11.0 - 11.5). Upon drying it forms a thin glass film that can cut skin. Spilled material may cause a slipping hazard. This material is not a crystalline silica; the dissolved silicate is amorphous and does not cause silicosis.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Trade Secret Notice	Detailed formulation is proprietary information. The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret in accordance with 29 CFR 1910.1200(i).
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Section 4: FIRST AID MEASURES

On inhalation	Move to fresh air if mist or spray causes irritation. Seek medical attention if symptoms persist.
On skin contact	Wash with plenty of soap and water. Remove contaminated clothing. If skin irritation occurs, get medical attention.
On eye contact	Immediately rinse with plenty of water for at least 15 minutes, holding the eyelids open. Remove contact lenses if present and easy to do, and continue rinsing. Get medical attention.
On ingestion	Rinse mouth. Do not induce vomiting. Call a poison center or get medical attention if you feel unwell.
Acute/delayed symptoms	Direct eye contact causes serious irritation, with redness and swelling of the eyelids, conjunctiva and cornea. Prolonged skin contact may cause mild irritation, redness and dry skin. Swallowing may be harmful.
Medical advice	Treat symptomatically. There is no specific antidote. Significant exposures should be referred for medical attention immediately.
Special treatment needed	None normally required.

Section 5: FIREFIGHTING MEASURES

Suitable extinguishing media	Product is not flammable. Use fire-extinguishing media appropriate for surrounding materials. Water spray, foam, dry chemical, CO ₂ .
Unsuitable extinguishing media	None known
Specific hazards arising from the chemical	Product is water-based; not flammable. Combustion of organic components may produce CO, CO ₂ .
Protective equipment for firefighters	Standard protective gear and SCBA if in enclosed space
Special precautions for fire fighters	Prevent runoff from entering drains or waterways
Will hazardous combustion occur?	No

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions	Avoid inhalation of dust and contact with eyes. Use personal protective equipment as recommended in this section. Ensure adequate ventilation during cleanup.
Environmental precautions	Prevent significant releases into waterways
Methods for cleaning up	Contain and absorb with inert material. Collect into containers for disposal. Rinse area with water. Avoid creating dried dust during cleanup.
Recommended personal protective equipment	Gloves, safety glasses, and respiratory protection if dried dust is present.

Section 7: HANDLING AND STORAGE

Safe handling	This product is intended for use only in liquid form as supplied. If product begins to dry out, reconstitute with water before use. As a matter of good work practice, do not process dried residue into airborne dust and avoid drying residue on surfaces. Avoid eye contact. Use with adequate ventilation if spraying.
Safe storage	Keep container tightly closed. Store in cool, dry location. Protect from freezing and excessive heat.
Known incompatibilities	Strong acids/bases, strong oxidizers

Section 8: EXPOSURE CONTROL AND PERSONAL PROTECTION

Engineer Control	Ensure adequate ventilation. Provide an emergency eyewash fountain in the immediate work area.
Respiratory Protection	Use local exhaust ventilation to control airborne mist or dust. Respiratory protection recommended if airborne dust or mist exceeds exposure limits for nuisance dust (OSHA PEL).
Protective Gloves	Wear chemical-resistant gloves where skin contact is likely. Wash thoroughly after handling.
Protective Glasses	Wear safety glasses with side shields. Where eye contact is likely, wear chemical safety goggles; add a face shield when splashing is possible.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state/appearance	Liquid; clear to opaque
Color	Colorless to slight tint
Odor	Odorless to slight odor
Odor threshold	Not determined
pH	11.0 - 11.5
Boiling point/range	101-102 C (214-216 F)
Freezing point/range	-1 C (30 F)
Flash point	Not flammable
Evaporation rate	Not determined
Vapor density	Not determined
Solubility(ies)	Completely soluble in water (100%)
Vapor pressure	Not determined
Relative density	1.20 - 1.43 (water = 1)
Viscosity	Not determined
Partition coefficient (n-octanol/water)	Not determined
Explosive properties	None
Flammability (solid, gas)	Not applicable
Flammability limit in air (upper/lower)	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined

Section 10: STABILITY AND REACTIVITY

Chemical stability	Stable under normal conditions
Conditions to avoid	Freezing, excessive heat
Incompatible materials	Strong acids/bases, strong oxidizers
Hazardous decomposition products	CO, CO2 from organics
Possibility of hazardous reactions	None known
Reactivity	Non-reactive under normal use
Hazardous polymerization	Will not occur

Section 11: TOXICOLOGICAL INFORMATION

Information on likely routes of exposure	Eye contact, skin contact, inhalation of mist during spraying.
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Eye contact - serious eye damage or irritation	Causes serious eye irritation. Contact may cause severe irritation and redness of the eyelids, conjunctiva and cornea.
Skin contact - skin corrosion, sensitization or irritation	Prolonged contact may cause mild irritation, redness and dry skin. Dried residue forms a thin glass film that can cut skin.
Ingestion - carcinogenicity/aspiration hazard	May be harmful if swallowed (acute toxicity, oral, Category 5). Swallowing may cause irritation of the mouth, throat and gastrointestinal tract. Not a carcinogen and not an aspiration hazard.
Inhalation - respiratory sensitization/toxicity	Mist may cause mild respiratory irritation. No chronic inhalation hazard is expected from the product as supplied and used as directed.
Symptoms related to the physical chemical and toxicological characteristics	Serious eye irritation on direct contact; mild skin irritation on prolonged contact; irritation of the upper and lower airways and coughing from inhaled mist.
Information on toxicological effects	Acute effect: causes serious eye irritation (GHS Eye Irrit. 2A); may be harmful if swallowed. No chronic toxicological effects are expected from use of the product as sold - a LHAMA evaluation performed in accordance with ASTM D-4236 determined that the product contains no component requiring chronic hazard labeling.
Delayed or immediate effects	Immediate effect: eye irritation on contact. No delayed adverse health effects are expected under reasonably foreseeable conditions of use of the product as sold.
Germ cell mutagenicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Chemicals listed on NTP, IARC or OSHA as a carcinogen	None. This product contains no component listed by NTP, IARC, or OSHA as a carcinogen.
Additional information	This material is not a crystalline silica and does not cause pulmonary silicosis. As a matter of good work practice, avoid eye contact and wash thoroughly after handling.

Section 12: ECOLOGICAL INFORMATION (NON-MANDATORY)

Ecotoxicity	No components are expected to be acutely hazardous to aquatic life at use concentrations.
Persistence and degradability	Inorganic components are stable
Bioaccumulative potential	Low
Mobility in soil	Limited mobility; settles in sediment
Other adverse effects	Avoid uncontrolled releases

Section 13: DISPOSAL CONSIDERATIONS (NON-MANDATORY)

Disposal instructions	Dispose of in accordance with local, regional, and national regulations.
Local disposal regulations	Follow municipal waste disposal guidelines
Hazardous waste code	Not applicable.
Contaminated packaging	Empty containers may contain residue; rinse before disposal or recycling.
Waste residues	Collect and dispose of non-hazardous waste unless contaminated.

Section 14: TRANSPORTATION INFORMATION (NON-MANDATORY)

UN/ID number (DOT)	Not regulated
UN/ID number (IMDG)	Not regulated
UN/ID number (IATA)	Not regulated
Proper shipping name	Not applicable
Transport hazard class (DOT)	N/A

Transport hazard class (IMDG)	N/A
Transport hazard class (IATA)	N/A
Packing group (DOT)	N/A
Packing group (IMDG)	N/A
Packing group (IATA)	N/A
Environmental provisions	No data
Special precautions	None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code	No data
Emergency Response Guide Number	No data
Pictograms (US)	None
Pictograms (IATA)	None
Pictograms (IMDG: Marine Pollutant)	None

Section 15: REGULATORY INFORMATION (NON-MANDATORY)

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	All components are listed or exempt
CERCLA (Superfund) reportable quantity (lbs.) (40 CFR 302.4)	Not regulated
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	None. This product contains no substance regulated under an OSHA specifically regulated substance standard (29 CFR 1910.1001-1050).
Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A)	Not regulated
SARA 304 Emergency release notification	Not regulated
SARA 311/312 (40 CFR 370) Hazardous Chemical	Not a hazardous chemical under SARA 311/312 (40 CFR 370). No acute or chronic hazard categories apply to the product as supplied.
SARA 313 (TRI reporting)	No reportable ingredients
Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)	Not regulated
Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List	Not regulated
Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)	Not regulated
Safe Drinking Water Act (SDWA)	Not regulated
Canadian Domestic Substances List (DSL)	Not regulated
TSCA	This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. Seq.
FDA	21 CFR 175.105
SARA/Title III	This product does not contain any substances at or above the reported threshold under Section 313, based on available data.
Conforms to ASTM D-4236	Conforms to ASTM D-4236. The formulation of this product has been reviewed by a board-certified toxicologist in accordance with ASTM D-4236 and the Labeling of Hazardous Art Materials Act (LHAMA, 16 CFR 1500), who determined that no acute or chronic health hazard labeling is required. The evaluation is on file with the producer and is available to the U.S. Consumer Product Safety Commission upon request.

California Proposition 65 Warning	No California Proposition 65 warning is required for this product. It contains no crystalline silica and no other chemical known to the State of California to cause cancer or reproductive toxicity at a level requiring a warning.
HMIS III Rating	Health=1, Flammability=0, Reactivity=0

Section 16: OTHER INFORMATION

Usage Warning	This product is intended for use only in liquid form as supplied. If product begins to dry out, reconstitute with water before use. As a matter of good work practice, do not process dried residue into airborne dust.
Disclaimer	Prepared according to OSHA HCS 2012. The recommendations and information contained in this SDS are compiled from sources believed to represent the most current information available when the SDS was prepared. However, the manufacturer / distributor of this product does not provide any warranty, guarantee of representation as to the correctness or sufficiency of this information. If this material is used in large amounts and/or an unusual manner, the user is obliged to determine what safety measures are appropriate, including the applicable and relevant workplace and environmental regulations pertaining to handling, use and disposal.
Abbreviation: ACGIH	American Conference of Governmental Industrial Hygienists
Abbreviation: ASTM	American Society for Testing and Materials
Abbreviation: CAS	Chemical Abstract Service
Abbreviation: CFR	Code of Federal Regulations
Abbreviation: DOT	Department of Transportation
Abbreviation: GHS	Globally Harmonized System of Classification and Labelling of Chemicals
Abbreviation: HMIS	Hazardous Materials Identification System
Abbreviation: IARC	International Agency for Research on Cancer
Abbreviation: NTP	National Toxicology Program
Abbreviation: OSHA	Occupational Safety and Health Administration
Abbreviation: PEL	Permissible Exposure Limit (set by OSHA)
Abbreviation: SDS	Safety Data Sheet
Abbreviation: TSCA	Toxic Substances Control Act
Abbreviation: TWA	Time-Weighted Average (typically over 8 hours)
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