SAFETY DATA SHEET (SDS)

SECTION 1 – IDENTIFICATION

Product Name:
Pro Powders Silica Pro

Chemical Name:
Potassium Silicate (K_2SiO_3)

Alternative names

Silicic acid, potassium salt
Soluble potash glass
Potash water glass
Potassium water glass

CAS No. 1312-76-1

Recommended Use:
Agricultural / horticultural additive providing soluble potassium and silicon for plant supportand stress resistance.

Restrictions on Use:
Not for food, feed, or pharmaceutical use.

Details of the supplier:

Manufacturer:
DL Wholesale Inc.
3160 N Chrisman Rd Ste 100,
Tracy
CA 95304

Telephone:
+1 510-550-0018

Emergency Contact:
CHEMTREC: 1-800-424-9300

SECTION 2 – HAZARD IDENTIFICATION

GHS Classification:

- H314: Serious eye damage / irritation Category 1
- Skin corrosion / irritation: Category 1B
- H335: STOT - single exposure Category 3

Signal word:
DANGER

Pictograms:

Hazard Statements: H319: Causes serious eye irritation.
H335: May cause respiratory irritation.

Precautionary Statements:

P261: Avoid breathing dust.

P262: Do not get in eyes, on skin, or on clothing.

P280: Wear protective gloves / protective clothing / eye protection / face protection.

P303+P361+P353: IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Other Hazards: Not classified as PBT or vPvB.
Can etch glass if not promptly removed.

SECTION 3 – COMPOSITION

Chemical Identity: Potassium Silicate

Alternative names *Silicic acid, potassium salt, Soluble potash glass Potash water glass, Potassium water glass*

CAS Number: 1312-76-1

Composition: Approximately 86% potassium silicate solids (33% K_2O, 53% SiO_2) and 14% bound water.

Impurities and Additives: May contain trace elements (e.g., arsenic, cadmium, lead) below OSHA thresholds. No stabilizers intentionally added.

SECTION 4 – FIRST AID MEASURES

Eye Contact: Rinse cautiously with water or eyewash solution for at least 15 minutes. Seek medical attention immediately.

Skin Contact: Wash with plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention for irritation.

Inhalation: Move to fresh air and keep at rest. Seek medical at tention if symptoms persist.

Ingestion: Rinse mouth. Do not induce vomiting. Get immediate medical at tention. Wash mouth out with water and then drink water after do not induce vomiting.

Symptoms/Effects: Irritation to eyes, skin & respiratory system. Potassium silicate's toxicity is influenced by its silica-alkali balance and by how alkaline the material is along with the Ph.

Special Treatment: Seek medical attention immediately.

SECTION 5 – FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Use media appropriate for surrounding fire (water, foam, dry chemical, CO_2).

Specific Hazards: Product is non-flammable; may release irritating fumes if heated.

Protective Equipment: Firefighters should wear SCBA and full protective gear.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid dust generation. Wear appropriate PPE.

Environmental Precautions: Prevent release to drains or surface waters. Alert proper authorities if chemical has entered water ways or sewer, or has contaminated any soil or vegetation.

Cleanup: Sweep or vacuum. Avoid wet sweeping. Collect in labeled containers.

SECTION 7 – HANDLING AND STORAGE

Handling:	Avoid dust formation. Use PPE. Do not eat, drink, or smoke during handling. Wash hands after use.
Storage:	Store tightly closed in a cool, dry area away from acids and reactive metals.

Not Compatible Storage:

Container Material	
Aluminum, Zinc, Tin, Lead, Copper, or Galvanized Steel	*Reacts with alkalis to produce hydrogen gas (fire/explosion hazard) and metal silicates.*
Carbon Steel (uncoated)	*Can corrode or form insoluble silicates over time.*
Glass or Silica-based materials	*Alkaline solutions can etch or dissolve glass, slowly releasing silica gel.*
Reactive Plastics (e.g., Nylon, Polyamide)	*May absorb or degrade due to high pH, becoming brittle.*
Unlined Fiberboard or Cardboard	*Absorbs moisture and alkaline dust, leading to weakening or disintegration.*

Recommended Storage:

Container Material	
High-Density Polyethylene (HDPE)	*Chemically resistant to strong alkalis. Standard for bulk silicate packaging.*
Polypropylene (PP)	*Similar chemical resistance; often used for bins and inner liners.*
Stainless Steel (304/316)	*Acceptable for long-term storage tanks; resistant to alkalinity.*
Epoxy-lined drums or totes	*Protective coating prevents reaction with metal.*

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits:

OSHA PNOR:	15 mg /m ³ total dust; 5 mg /m ³ respirable fraction (8-hr TWA)
ACGIH:	10 mg /m ³ inhalable; 3 mg /m ³ respirable
Manufacturer Advisory:	2 mg /m ³ (15-min STEL, KOH analogy)
Engineering Controls:	Provide local or general ventilation to maintain dust below limits.
Respiratory Protection:	NIOSH N95 or FFP2 (EN 149) if airborne dust exceeds limits.
Eye /Face Protection:	ANSI Z87.1 chemical goggles or EN 166 face shield.
Hand Protection:	Nitrile or PVC gloves (EN 374 or ASTM D6319). Break through time is more than 480 Minutes
Skin /Body Protection:	Long sleeves or chemical-resistant clothing.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	White to light tan powder
Odor:	Odorless
Odor Threshold:	N/A
pH (1% solution):	11 – 12
Melting Point:	>1000 ° C
Freezing Point:	N/A
Initial Boiling Point/Range:	N/A (solid)
Flash Point:	N/A
Evaporation Rate:	N/A
Flammability (solid/gas):	N/A
Upper/Lower Explosive Limits:	N/A
Vapor Pressure:	N/A (non-volatile)
Vapor Density:	N/A
Relative Density:	No Information
Solubility:	Soluble in water
Partition Coefficient (n-octanol/water):	N/A
Auto-Ignition Temperature:	N/A
Decomposition Temperature:	N/A
Viscosity:	N/A (solid)

SECTION 10 – STABILITY AND REACTIVITY

Reactivity:	Alkaline; Reacts with Acids. May react with certain metals & glass in the presence of moisture. Generates heat when mixed with acids.
Chemical Stability:	Stable under recommended conditions.
Possibility of Hazardous Reactions:	Reacts with acids. Reacts with ammonium salts to form ammonia gas. Reacts with Zinc, Aluminum & Tin metals to form hydrogen gas. May form carbon monoxide with organic / sugar residues at elevated temperatures. Polymerization of silicic acid under acidic conditions. Avoid oxidizing agents and halogenated organics. Conditions to Avoid: Heat, moisture, acids, reactive metals.
Incompatible Materials:	Acids, ammonium salts, reactive metals, oxidizers, organic / halogenated compounds, carbonaceous residues.
Hazardous Decomposition Products:	None
Incompatible conditions:	Stated in Possibility of Hazardous Reactions

SECTION 11 – TOXICOLOGICAL INFORMATION

Routes of Exposure:	Inhalation, skin contact, eye contact, ingestion
Acute Toxicity:	Oral LD50 (rat) >2000 mg / kg; Dermal LD50 (rat) >2000 mg / kg; Inhalation LC50 (rat) >2mg / L (4 h).
Skin Corrosion / Irritation:	Causes severe irritation due to alkalinity
Serious Eye Damage / Irritation:	Causes serious eye damage
Respiratory Effects:	Dust may irritate nose, throat, lungs (STOT-SE 3).
Ingestion Effects:	May cause burns to mouth, throat, and stomach.
Sensitization:	Not expected for skin or respiratory
Mutagenicity /Reproductive Toxicity:	No evidence based on available data.
STOT (Repeated):	No adverse ef fects identified.
Carcinogenicity:	Not listed by IARC, NTP, or OSHA
Aspiration Hazard:	Not considered an aspiration hazard

SECTION 12 – ECOLOGICAL INFORMATION (Non-Mandatory)

Ecotoxicity:	Not classified as hazardous; alkaline solutions may harm aquatic life in concentrated spills. Fish LC50 (48HR) >146mg/l Aquatic Invertebrates EC50 (24HR) >146mg/l
Persistence /Degradability:	Inorganic; forms dissolved silica over time.
Bioaccumulation:	Not expected.
Mobility:	Soluble in water.
PBT & vPvB:	Not classified
Other Effects:	May raise the PH of the ecosystem

SECTION 13 – DISPOSAL CONSIDERATIONS (Non-Mandatory)

Dispose of contents / container in accordance with local, state, and federal regulations. Neutralize alkaline solutions with dilute acid before disposal if required. Avoid release to surface waters.

SECTION 14 – TRANSPORT INFORMATION (Non-Mandatory)

DOT:	Not regulated
IATA:	Not regulated
IMDG:	Not regulated
UN Number:	None
Packing Group:	None
Environmental Hazards:	None known.

SECTION 15 – REGULATORY INFORMATION (Non-Mandatory)

OSHA Hazard Communication:	Classified as corrosive and health hazard
TSCA:	Listed.
SARA 302 / 304 / 313:	Not listed.
California Proposition 65:	Contains no listed substances.
EPA:	Not a pesticide.
CARB VOC:	Not applicable

SECTION 16 – OTHER INFORMATION

Revision Date:	October 16 2025
Revision Number:	v1
Prepared by:	DL Wholesale Inc.
Contact:	+1 510-550-0018 3160 N Chrisman Rd Ste 100, Tracy, CA 95304

Disclaimer:
The information in this Safety Data Sheet is believed accurate as of the revision date. DL Wholesale Inc. assumes no liability for completeness or accuracy. Users are responsible for safe handling and compliance with all applicable regulations.