HARGETT MATERIALS INCORPORATED
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Safety Data Sheet

DUAL GUARD

Section 1. Identification

Product Use: Liquid sealer for concrete
Date Issue: 5/4/20 **Revised:** 5/4/20

Emergency Telephone Number (U.S.) INFOTRAC 1-800-535-5053
Emergency Telephone Number (International) 1-352-323-3500
Prepared By: **Hargett Materials Inc.**
Website: www.hargettmaterials.

Section 2. Hazard(s) identification

Physical hazards	Not classified	
Health hazards	Acute toxicity, oral	Category 5
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Specific target organ toxicity, single exposure; Respiratory tract irritation	Category 3
Environmental hazards	Not classified	
OSHA defined hazards	Not classified	

GHS Label Elements

Hazard pictograms:

Signal Word: **WARNING**

Hazard statements: May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.

Precautionary statement

Prevention: Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, eye protection, face protection. Avoid breathing mist or vapors. Use only outdoors or in a well-ventilated area.

Response:

IF SKIN irritation occurs: Get medical attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Take off contaminated clothing. Call a POISON CENTER or doctor/... if you feel unwell.

Storage: Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal: Dispose of container in accordance with local, state, and federal regulations.

Hazards Not Otherwise Classified: None known

Supplemental information None

Section 3. Composition/Information on Ingredients

1. Potassium Methyl Siliconate

Concentration <4%

Other names / synonyms Potassium Siliconate; potassium methyl silanetriolate, Dow Corning 777, T 51; Penta 811; Penta 811K; Silres 501; Szilor C-II; Silres BS 16; Wacker BS 15; Rhodorsil 51T; Rhoximat Siliconate 51T

CAS no. 31795-24-1
Index no.

Acute toxicity, oral, Cat.5
Skin corrosion/irritation, Cat. 2
Serious eye damage/eye irritation, Cat. 2A
Specific target organ toxicity, single exposure; Respiratory tract irritation, Cat.3

H303	May be harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation

2. Potassium Silicate

Concentration < 20%

Other names / synonyms ps7; kasil; kasil6; pyramid120; Potssium silicate; soluble potash glass; q POTASSIUM SILICATE; SILICATE, POTASSIUM; potash water glass; potassium water glass

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CAS no. 1312-76-1
Index no.

Acute toxicity, oral, Cat.5
Skin corrosion/irritation, Cat. 2
Serious eye damage/eye irritation, Cat. 2A
Specific target organ toxicity, single exposure; Respiratory tract irritation, Cat.3

H303 May be harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

3. **Methanol**

Concentration <0.25%

Other names / synonyms Methyl alcohol

CAS no. 67-56-1

Acute toxicity, dermal, Cat. 3
Flammable liquid, Cat. 2
Acute toxicity, oral, Cat. 3
Acute toxicity, Inhalation, Cat. 3

H225 Highly flammable liquid and vapor
H301 Toxic if swallowed
H311 Toxic in contact with skin
H311 Toxic if inhaled
H370 Causes damage to organs

4. Deionized Water

Concentration <75%

Other names / synonyms water

EC no. 231-791-12
CAS no. 7732-18-5
Index no.

Trade secret statement (OSHA 1910.1200(i))

THE IDENTITY OF INDIVIDUAL COMPONENTS OF THIS PRODUCT IS PROPRIETARY INFORMATION AND REGARDED AS A TRADE SECRET. THERE ARE NO KNOWN HAZARDOUS SUBSTANCES PER SARA TITLE III OR TSCA EPA INVENTORY LIST.

Section 4. First Aid Measures

Eye Contact Immediately flush eyes with plenty of water. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention immediately.

Skin Contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if irritation develops.

Inhalation Move exposed person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. If affected person is conscious, give plenty of water to drink. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Important symptoms and effects, both acute and delayed:

Headache, Shortness of Breath, Irritation, Nausea and Vomiting

Indication of any immediate medical attention and special treatment needed:

If seeking medical attention, provide SDS document to physician. Physician should treat symptomatically.

Section 5. Fire Fighting Measures

Flash Point	NONE
Flammable Limits	N/A
Flammability	Non-Flammable
Fire hazard	None
Fire-Fighting Procedures	Use an extinguishing agent suitable for the surrounding fire.

Section 6. Accidental Release Measures

Spills Put on appropriate personal protective equipment (see section 8). Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble or absorb with an inert dry material and place in an appropriate waste disposal container.

Disposal Method Dispose of in accordance with state, federal, or local Regulations.

Section 7. Handling and Storage

Handling Put on appropriate personal protective equipment (see section 8). Avoid contact with eyes, skin and clothing. Do not breathe vapor or mist. Do not ingest. Do not reuse container. Wash thoroughly after handling.

Storage Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food, drink and children. Store between the following temperatures: 40°F - 86°F (4.4°C - 30°C).

Keep out of the reach of children.

Section 8. Exposure Controls/Personal Protection

1.Control Parameters

Substance	Occupational Exposure Limits
Potassium Silicate	No Occupational Exposure Limit assigned. An exposure limit of 2 mg/m3 (15 min TWA) is recommended by analogy with potassium hydroxide.
Potassium Methyl Silicate	No Occupational Exposure Limit assigned. An exposure limit of 2 mg/m3 (15 min TWA) is recommended by analogy with potassium hydroxide.

Ingredients with workplace control parameters

Ingredients CAS-	CAS-No.	Value Type (form of exposure)	Control parameters / Permissible Concentration	Basis
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200ppm 260 mg/m3	OSHA Z-1

Biological occupational exposure limits

Ingredients	CAS-No	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases	15 mg/l	ACGIH BEI

2. Exposure Controls Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place.

3. Engineering Controls Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access. Processing may form hazardous compounds (see section 10).

Personal Protection

Respiratory :General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Eyes **:**Wear the following personal protective equipment: Chemical resistant goggles must be worn. If splashes are likely to occur, wear: Face-shield

Skin and Body **:** Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc.)

Section 9. Physical and Chemical Properties

Boiling Point	147.5°F
Vapor Pressure (@20OC)	N/A
Vapor Density (Air=1)	N/A
Solubility in H^2 O	Complete
Specific Gravity	<1.39 g/ml
Evaporation Rate (Acetone=1)	N/A
pH	12 To 13
Appearance and Color	Clear liquid

Section 10. Stability and Reactivity

Chemical Stability	Stable under normal conditions
Conditions to Avoid	None
Materials to Avoid	Oxidizing agents, acids. Gels and generates heat when mixed with acid. May react with ammonium salts resulting in evolution of ammonia gas. Flammable hydrogen gas may be produced on contact with aluminum, tin, lead, and zinc.
Hazardous Polymerization	None
Hazardous Decomposition Products	Hydrogen, Formaldehyde.

Section 11. Toxicological Information

Information on toxicological effects

Potassium Silicate

Acute Data :When tested for primary irritation potential, this material caused moderate irritation to the eyes and slight irritation to the skin. Human experience indicates that irritation occurs when potassium silicates get on clothes at the collar, cuffs or other areas where abrasion may occur. The acute oral toxicity of this product has not been tested. When chemically similar sodium silicates were tested on a 100% solids basis, their single dose acute oral LD50 in rats ranged from 1500 mg/kg to 3200 mg/kg. The acute oral lethality resulted from non-specific causes. This product contains approximately 39.2% potassium silicate.

Subchronic Data : The subchronic toxicity of this material has not been tested. In a study of rats fed chemically similar sodium silicate in drinking water for three months, at 200, 600 and 1800 ppm, changes were reported in the blood chemistry of some animals, but no specific changes to the organs of the animals due to potassium silicate administration were observed in any of the dosage groups. Another study reported adverse effects to the kidneys of dogs fed potassium silicate in their diet at 2.4g/kg/day for 4 weeks, whereas rats fed the same dosage did not develop any treatment-related effects. Decreased numbers of births and survival to weaning was reported for rats fed sodium silicate in their drinking water at 600 and 1200 ppm.

Special Studies :The mutagenic potential of this material has not been tested. Chemically similar sodium silicate was not mutagenic to the bacterium E. Coli when tested in a mutagenicity bioassay. There are no known reports of carcinogenicity of potassium silicates. Frequent ingestion over extended periods of time of gram quantities of silicates is associated with the formation kidney stones and other siliceous urinary calculi in humans. Potassium silicate is not listed by IARC, NTP or OSHA as a carcinogen.

Potassium methyl siliconate **:**Acute oral toxicity: LD50 (Rat): > 2,000 mg/kg

Assessment: The substance or mixture has no acute oral toxicity Remarks: On basis of test data.

Corrosive after 3 minutes or less of exposure Remarks: Information taken from reference works and the literature. Irreversible effects on the eye Remarks: Expert judgment.

Genotoxicity in vitro :Test Type: Bacterial reverse mutation assay (AMES) Result: negative Remarks: On basis of test data. Genotoxicity in vivo: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Ingestion
Result: negative Remarks: Based on data from similar materials

Germ cell mutagenicity - Assessment: Animal testing did not show any mutagenic effects

Effects on fertility :Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat, male and female Application Route: Ingestion Symptoms: No effects on fertility. Remarks: Based on data from similar materials

Effects on fetal development :Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test Species: Rat, male and female Application Route: Ingestion Symptoms: No effects on fetal development. Remarks: Based on data from similar materials

Reproductive toxicity – Assessment :No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

Routes of exposure: Ingestion Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Routes of exposure: inhalation (vapor) Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or less

Repeated dose toxicity

Ingredients: Potassium methylsilanetriolate Species: Rat Application Route: Ingestion Remarks: Based on data from similar materials Species: Rat Application Route: inhalation (vapor) Remarks: Based on data from similar materials
Species: Rat NOAEL: 1.06 mg/l Application Route: inhalation (vapor) Exposure time: 90 Days Aspiration toxicity Not classified based on available information.

Methanol

Acute oral toxicity :Acute toxicity estimate (Humans): 300 mg/kg Method: Expert judgment

Acute inhalation toxicity :Acute toxicity estimate: 3 mg/l Exposure time: 4 h Test atmosphere: vapor Method: Expert judgment Remarks: Based on harmonized classification in EU regulation 1272/2008, Annex VI

Acute dermal toxicity :Acute toxicity estimate (Humans): 300 mg/kg; Method: Expert Judgment

Skin corrosion/irritation :Causes severe burns.

Animal Testing

Species: Rabbit Result: No skin irritation

Species: Rabbit Result: No eye irritation

Respiratory or skin sensitization. Skin sensitization not classified based on available information. Respiratory sensitization not classified based on available information.

Maximization Test
Routes of exposure: Skin contact
Species: Guinea pig
Result: negative

Species: Mouse
Application Route: inhalation (vapor)
Exposure time: 18 Months
Result: negative

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen y NTP.

Reproductive toxicity :Not classified based on available information.

Germ cell mutagenicity :Not classified based on available information.

Genotoxicity in vitro :Test Type: Bacterial reverse mutation assay (AMES) Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test; Result: negative

Genotoxicity in vivo :Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse; Application Route: Intraperitoneal injection; Result: negative

Carcinogenicity :Not classified based on available information.

Effects on fertility : Test Type: Fertility/early embryonic development Species: Mouse Application Route: Ingestion Result: negative

Effects on fetal development : Test Type: Embryo-fetal development Species: Mouse Application Route: Ingestion Result: positive Remarks: The effects were seen only at maternally toxic

STOT-single exposure
Not classified based on available information.

Aspiration toxicity Not classified based on available information.

Section 12. Ecological Information

Potassium Silicate

Ecotoxicity: Several terrestrial toxicity assessments have been performed with potassium silicate solutions using Environment Canada test methods. The following data is reported: seed germination, seedling emergence, root elongation and earthworm survival LC50 / EC50, LC25 / EC25 > 100 - non-toxic. The following data is reported for chemically similar sodium silicates on a 100% solids basis: A 96 hour median tolerance for fish (Gambusia affnis) of 2320 ppm; a 96 hour median tolerance for water fleas (Daphnia magna) of 247 ppm; a 96 hour median tolerance for snail eggs (Lymnea) of 632 ppm; and a 96 hour median tolerance for Amphipoda of 160 ppm. This product contains approximately 39.2% potassium silicate.

Environmental Fate: This material is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is acutely harmful to aquatic life. Diluted material rapidly depolymerizes to yield dissolved silica in a form that is indistinguishable from natural dissolved silica. It does not contribute to BOD. This material does not bioaccumulate except in species that use silica as a structural material such as diatoms and siliceous sponges. Where abnormally low natural silica concentrations exist (less than 0.1 ppm), dissolved silica may be a limiting nutrient for diatoms and a few other aquatic algal species. However, the addition of excess dissolved silica over the limiting concentration will not

stimulate the growth of diatom populations; their growth rate is independent of silica concentration once the limiting concentration is exceeded. Neither silica nor potassium will appreciably bioconcentrate up the food chain.

Physical/Chemical: Sinks and mixes with water. Only water will evaporate from this material.

Potassium methyl siliconate

Toxicity to microorganisms :EC50: > 100 mg/l Method: OECD Test Guideline 209

Methanol:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h

Toxicity to algae :EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000 mg/l Exposure time: 96 h Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l Exposure time: 200 h Toxicity to microorganisms : IC50: > 1,000 mg/l Exposure time: 3 h

Persistence and degradability :N/A

Ingredients:

Methanol:

Biodegradability : Result: Readily biodegradable. Biodegradation: 95% Exposure time: 20 d

Bioaccumulative potential :N/A

Ingredients

Potassium methylsilanetriolate

Partition coefficient : noctanol/water : log Pow: -2.36

Methanol

Bioaccumulation : Species: Leuciscus idus (Golden orfe) Bioconcentration factor (BCF): < 10

Partition coefficient: noctanol/water : log Pow: -0.77

Mobility in soil: No data available

Other adverse effects : No data available

Section 13. Disposal Considerations

Waste Information

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Consult your local or regional authorities for additional information.

Waste Stream

Code: D002
Classification: - [Hazardous waste]
Origin: - [RCRA waste.]

Section 14. Transport Information

UN or NA Number None
DOT Shipping Name Cement Sealer – Non-Regulated Material
Reportable Quantity None .

Other Precautions None

Section 15. Regulatory Information

Federal and State Regulations:

SARA 313 toxic chemical notification and release reporting:

Product Name:

Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: No products were found.

Clean Air Act (CAA) 112 regulated toxic substances: No products were found.

All Components of this product are listed or exempt from listing on TSCA Inventory.

State Regulations

California Prop 65 No products were found.

Section 16. Other Information

HMIS ratings
Health: 1
Flammability: 0
Physical Hazard: 0

NFPA ratings
Health: 1
Flammability: 0
Instability: 0

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