

SAFETY DATA SHEET

Identification: VAPOR LOCK™ 20/23

What it does: Contains an Inherent Hydrophobic Material that Acts as a Water Repellency Aid
Company Name: Biorok
ABN: 86 158 108 091 – Under License from SPG
Address: Suite 3, Level 1, 42-44 Waymouth Street, Adelaide 5000
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1. PRODUCT AND COMPANY IDENTIFICATION	
Product Name	Vapor Lock™ 20/23
Product Use	<i>A ready to use, water-based, penetrating sealer for concrete for sealing, hardening, dust-proofing, waterproofing and weatherproofing.</i>
Distributor's Name	<i>BioRok Technologies Pty Ltd Suite 3, Level 1, 42-44 Waymouth Street, Adelaide 5000</i>
Manufacturer's Name	<i>Specialty Products Group (SPG) 6254 Skyway Road, SMITHVILLE, ONTARIO L0R 2A0 CANADA</i>
Emergency Number	<i>131 126 – Australian Poison Information Centre</i>
SDS Revision Date	<i>1st April 2019</i>

2. COMPOSITION/INFORMATION ON INGREDIENTS					
Hazardous Ingredients	Weight %	CAS Number	TWA	LD50 ORAL RAT	LC50 INHAL RAT
		Number	ppm	Mg / kg	ppm
<i>Silicic Acid, Sodium Salt Proprietary Blend</i>	<i>5 - 25</i>	<i>1344-09-8</i>	<i>N/A</i>	<i>N/A</i>	<i>N/A</i>

3. HAZARD IDENTIFICATION	
Route of entry	<i>Eye contact, ingestion, skin contact, inhalation.</i>
Carcinogenic Status	<i>Not considered carcinogenic by NTP, IARC and OSHA.</i>
Target organs	<i>Eyes, skin and lungs.</i>
Health Effects: Eye	<i>Moderate irritation expected.</i>
Health Effects: Skin	<i>Moderate irritation expected.</i>
Health Effects: Ingestion	<i>May cause irritation to the mouth, oesophagus and stomach and damage to kidney, central nervous system and blood.</i>
Health Effects: Inhalation	<i>Spray mist is irritation to the respiratory system.</i>

4. FIRST AID MEASURES	
Eye	<i>Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention.</i>
Skin	<i>Immediately flood the skin with large quantities of water. Remove contaminated clothing and shoes. Obtain medical attention.</i>
Ingestion	<i>If swallowed, obtain medical attention immediately. If victim is fully conscious, give a cupful of milk. If conscious induce vomiting. Never give anything by mouth to an unconscious person.</i>
Inhalation	<i>Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.</i>

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5. ACCIDENTAL RELEASE MEASURES	
Spill Procedures	<i>Small spills – Mop up and neutralise liquid, dispose in accordance with federal, provincial and local regulations or permits. Large spills – Isolate hazard area. Do not touch or walk through spilled material. Isolate, construct barrier and store discharged material, if possible. Use sand or earth to contain material. If containment is impossible, neutralise contaminated area and flush with large quantities of water.</i>
Personal Precautions	<i>Wear chemical goggles, body-covering protective clothing, chemical resistant gloves and rubber boots that are AS-NZ S1716-2012 approved. Use a NIOSH approved dust and mist respirator where spray mist occurs.</i>
Environmental Precautions	<i>Prevent the material from entering drains or watercourses. Notify authorities if spill has entered watercourse or sewer.</i>

6. FIRE FIGHTING MEASURES	
Conditions of flammability	<i>Non-Flammable. Will not support combustion.</i>
Extinguishing media	<i>Is compatible with all extinguishing media.</i>
Special hazards of product	<i>Dries to form glass film which can easily cut the skin. Spilled material is very slippery. Can etch glass if not promptly removed.</i>
Protective equipment for fire fighting	<i>Wear full protective clothing, when this material is present in the area of the fire.</i>
Flash point (PMCC) (°C)	<i>Non-Flammable.</i>
Upper flammable limit % VOL	<i>N/A</i>
Lower flammable limit % VOL	<i>N/A</i>
Autoignition temp (°C)	<i>N/A</i>
Explosion Data – Sensitivity to impact	<i>N/A</i>
Explosion Data – Sensitivity to static discharge	<i>N/A</i>

7. HANDLING AND STORAGE	
Handling	<i>Avoid contact with eyes, skin and clothing. Avoid breathing mist. Keep container closed. Promptly clean up spills.</i>
Storage	<i>Keep container closed. Store in clean steel or plastic containers. Separate from acids, reactive metals and ammonium salts. Storage temperature 0-95°C. Do not store in aluminium, fibreglass, copper, brass, zinc or galvanised containers.</i>

8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
Engineering Control Measures	<i>Use with adequate ventilation. Keep containers closed. Safety showers and eyewash fountain should be within direct access.</i>
Respiratory Protection	<i>Use a NIOSH approved dust and mist respirator where spray mist occurs. Observe provincial regulations for respiratory use.</i>
Hand Protection	<i>Full-length gloves should be worn during all handling operation to protect against slashing. Neoprene gloves.</i>
Eye Protection	<i>Chemical goggles should be worn during all handling operations to protect against splashing.</i>
Body Protection	<i>Discard contaminated protective equipment. If there is danger of splashing, wear overalls or apron</i>
Protecting During Application	<i>During application, adequate ventilation must be provided. Mix in a well – ventilated area. If ventilation is poor, wear respiratory protection. Dries to form glass film which can easily cut the skin. Spilled material is very slippery. Can etch glass if not promptly removed.</i>

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9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	<i>Liquid</i>
Odour & Colour	<i>Odourless & Clear</i>
Odour Threshold (ppm)	<i>N/A</i>
Specific Gravity	<i>1.07 – 1.10</i>
Vapour Density (AIR =1)	<i>No Data</i>
Vapour Pressure = 20 C	<i>No Data</i>
Evaporation Rate	<i>No Data</i>
Boiling Range / Point (°C)	<i>No Data</i>
Freezing Point (°C)	<i>No Data</i>
PH (1% solution at 20 C)	<i>No Data</i>
Coefficient of water / oil distribution	<i>No Data</i>
Solubility In Water	<i>Miscible</i>
VOC (G/L)	<i>0</i>

10. STABILITY AND REACTIVITY

Stability	<i>Stable under normal conditions.</i>
Conditions to avoid	<i>Do not freeze.</i>
Materials to avoid	<i>Gels can generate 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 aluminium, tin, lead and zinc. May react with strong oxidising agents.</i>
Hazardous Polymerisation	<i>Will not occur.</i>
Hazardous Decomposition Products	<i>Hydrogen gas.</i>

11. TOXICOLOGICAL INFORMATION

Effects of acute exposure	<i>Irritation to the eyes and skin is expected. Irritation and burning sensation of mouth, throat, nausea, vomiting and abdominal pain. On inhalation of liquid will cause irritation to mucous membranes coughing and wheezing.</i>
Effects of chronic exposure	<i>May cause dermatitis and irritation or repeated contact.</i>
Exposure limits	<i>N/A</i>
Irritancy	<i>Moderate irritation expected.</i>
Sensitisation	<i>No Data</i>
Carcinogenicity	<i>Not listed as a carcinogen by NTP, OSHA and IARC.</i>
Reproductive toxicity	<i>No Data</i>
Teratogenicity	<i>No Data</i>
Mutagenicity	<i>No Data</i>
Toxicologically synergistic products	<i>No Data</i>

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12. ECOLOGICAL INFORMATION	
Mobility	<i>Sinks and mixes with water. Diluted material rapidly depolymerises to yield dissolved silica in a form that is indistinguishable from natural silica.</i>
Persistence / Degradability	<i>This product is not persistent in aquatic systems, but its high pH when undiluted or un-neutralised, is harmful to aquatic life. Full ecological impact has not been determined.</i>
Bio-Accumulation	<i>Neither silica nor sodium will appreciable bio concentrate up the food chain.</i>
Eco toxicity	<i>The following data is reported for sodium silicate on a 100% basis: A 96-hour median tolerance for: Fish (Gambusia affinis) of 2320 ppm; Water fleas (Daphnia magna) of 247 ppm Snail eggs (Lymnaea) of 632 ppm (Amphipoda) of 160 ppm</i>

13. DISPOSAL CONSIDERATIONS	
Product Disposal	<i>Absorb product on an inert material (sand or earth) and transfer absorbed product into a waste container. Dispose of in accordance with all applicable local and national regulations.</i>
Container Disposal	<i>Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.</i>

14. TRANSPORTATION INFORMATION	
CANADA	<i>TDG Classification</i>
Hazard Label: Not Required	<i>Not Regulated, keep from freezing</i>
EXPORT	
DOT CFR 172.101 Data	<i>Not Regulated</i>
UN Proper Shipping Name	<i>N/A</i>
UN Class	<i>N/A</i>
UN Number	<i>N/A</i>
UN Packaging Group	<i>N/A</i>
Flash Point	<i>N/A</i>
Hazardous Material	<i>N/A</i>
Hazardous Label	<i>N/A</i>

15. REGULATORY INFORMATION	
WHMIS Classification	<i>Class D, Div.2, Subdivision B – Material causing other toxic effects.</i>
CEPA Status (DSL)	<i>All of the ingredients of this product are listed on the Domestic Substances List.</i>
<i>This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by CPR.</i>	

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16. OTHER INFORMATION	
Hazard Rating	<i>0 = Minimal; 1 = Slight; 2 = Moderate; 3 = High; 4 = Extreme</i>
	<i>Health = 2</i>
	<i>Flammability = 0</i>
	<i>Reactivity = 0</i>
Abbreviations	<i>N/A: Denotes no applicable information found or available</i>
	<i>CAS#: Chemical Abstracts Service Number</i>
	<i>ACGIH: American Conference of Governmental Industrial Hygienists</i>
	<i>OSHA: Occupational Safety and Health Administration</i>
	<i>TLV: Threshold Limit Value</i>
	<i>PEL: Permissible Exposure Limit</i>
	<i>STEL: Short Term Exposure Limit</i>
	<i>NTP: National Toxicology Program</i>
	<i>IARC: International Agency for Research on Cancer</i>
	<i>R: Risk</i>
	<i>S: Safety</i>
	<i>LD50: Lethal Dose 50%</i>
	<i>LC50: Lethal Concentration 50%</i>
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