SAFETY DATA SHEET

Identification: VAPOR LOCK™ 40/40

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
Web: www.biorok.com.au
Phone: +61 08 8212 4052

1. PRODUCT AND COMPANY IDENTIFICATION	
PRODUCT NAME	***Vapor Lock ™ 40/40***
PRODUCT USE	*Water-based concrete admixture that stops the route of moisture migration*
Distributor's Name	*BioRok Technologies Pty Ltd* *Suite 3, Level 1, 42-44 Waymouth Street, Adelaide 5000*
MANUFACTURER'S NAME	*Specialty Products Group (SPG)* *6254 Skyway Road, SMITHVILLE, ONTARIO L0R 2A0 CANADA*
EMERGENCY NUMBER	*131 126 – Australian Poison Information Centre*
SDS Revision Date	*1st April 2019*

2. HAZARDS IDENTIFICATION	
ROUTE OF ENTRY	*Eye contact, Ingestion, Inhalation, Skin contact.*
CARCINOGENIC STATUS	*Not considered carcinogenic by NTP, IARC, and OSHA.*
TARGET ORGANS	*Eye, Skin, and lungs*
HEALTH EFFECTS – EYE	*Moderate irritation expected*
HEALTH EFFECTS – SKIN	*Moderate irritation expected.*
HEALTH EFFECTS – INGESTION	*May cause irritation to the mouth, esophagus and stomach and damage to kidney, central nervous system and blood.*
HEALTH EFFECTS – INHALATION	*Spray mist is irritating to the respiratory system.*

NFPA

HMIS

5-MINIMAL; 4-SLIGHT; 3-MODERATE; 2-HIGH; 1-EXTREME

3. COMPOSITION/INFORMATION ON INGREDIENTS					
HAZARDOUS INGREDIENTS	**CAS NUMBER**	**WEIGHT %CAS NUMBER**	**TWA Ppm**	**LD50 ORAL RAT Mg/kg**	**LC50 INHAL RAT ppm**
SILICIC ACID, SODIUM SALT PROPIETARY BLEND	1344-09-8	5-25	NA	NA	NA

4. FIRST AID MEASURES	
FIRST AID – INHALATION	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.
FIRST AID – SKIN	Immediately flood the skin with large quantities of water. Remove contaminated clothing and shoes. Obtain medical attention.
FIRST AID – EYE	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention.
FIRST AID – INGESTION	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.

INFORMATION FOR DOCTOR
Most important symptoms and effects, both acute and delayed.
No further relevant information
Indications of any immediate medical attention and special treatment needed.
No further relevant information available.

SAFETY DATA SHEET

5. FIRE FIGHTING MEASURES	
CONDITIONS OF FLAMMABILITY	*Non-flammable. Will not support combustion.*
EXTINGUISHING MEDIA	*Is compatible with all extinguishing media.*
SPECIAL HAZARDS OF PRODUCT	*Dries to form glass film which can easily cut the skin. Spilled material is very slippery. Can etch glass if not promptly removed.*
PROTECTIVE EQUIPMENT FOR FIRE FIGHTING	*Wear full protective clothing when this material is present in the area of the fire.*
EXPLOSION DATA – SENSITIVITY TO IMPACT	*N/A*
EXPLOSION DATA – SENSITIVITY TO STATIC DISCHARGE	*N/A*

6. ACCIDENTAL RELEASE MEASURES	
SPILL PROCEDURES	*Small spills – Mop up and neutralize 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, dike and store discharged material, if possible. Use sand or earth to contain material. If containment is impossible, neutralize contaminated area and flush with large quantities of water.*
PERSONAL PRECAUTIONS	*Wear chemical goggles, body-covering protective clothing, chemical resistant gloves and rubber boots. Use a NIOSH-approved dust and mist respirator where spray mist occurs.*
ENVIRONMENTAL PRECAUTIONS	*Prevent the material from entering drains or watercourses. Notify authorities if spill has entered watercourse or sewer.*

REFERENCES TO OTHER SECTIONS
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment See
Section 13 for disposal information

7. HANDLING AND STORAGE	
HANDLING	*Avoid contact with eyes, skin and clothing. Avoid breathing mist. Keep container closed. Promptly clean up spills.*
STORAGE	*Keep container closed. Store in clean steel or plastic containers. Separate from acids, reactive metals and ammonium salts. Storage temperature 0-95 deg C. Do not store in aluminum, fiberglass, copper, brass, zinc or galvanized containers.*

INFORMATION ABOUT PROTECTION AGAINST EXPLOSION AND FIRE
Keep ignition sources away – Do not smoke
Protect against electrostatic charges

SPECIFIC END USE(S)
No further relevant information available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
ENGINEERING CONTROL MEASURES	*Use with adequate ventilation. Keep containers closed. Safety shower and eyewash fountain should be within direct access.*
RESPIRATORY PROTECTION	*Use a NIOSH-approved dust and mist respirator where spray mist occurs. Observe Provincial regulations for respiratory use.*
HAND PROTECTION	*Full-length gloves should be worn during all handling operations. Neoprene gloves.*
EYE PROTECTION	*Chemical goggles should be worn during all handling operations to protect against splashing.*
BODY PROTECTION	*Discard contaminated protective equipment. If there is danger of splashing, wear overall or apron.*
PROTECTION DURING APPLICATION	*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.*

9. PHYSICAL AND CHEMICAL PROPERTIES	
PHYSICAL STATE	*Liquid*
ODOUR & APPEARANCE	*Odorless, clear*
ODOR THRESHOLD (ppm)	*NA*
SPECIFIC GRAVITY	*1.07 – 1.10*
VAPOR DENSITY (AIR = 1)	*ND*
VAPOR PRESSURE 20 C	*ND*
EVAPORATION RATE	*ND*
BOILING POINT (^{U} C)	*ND*
FREEZING POINT (^{U} C)	*ND*
pH	*ND*
COEFFICIENT OF WATER/OIL DISTRIBUTION	*ND*
SOLUBILITY IN WATER	*Miscible*
VOC (g/l)	*0*
FLASH POINT (PMCC) (°C/F)	*Non-flammable.*
UPPER FLAMMABLE LIMIT %VOL	*NA*
LOWER FLAMMABLE LIMIT %VOL	*NA*
AUTOIGNITION TEMP (°C/F)	*NA*

SAFETY DATA SHEET

10. STABILITY AND REACTIVITY	
STABILITY	*Stable under normal conditions*
CONDITIONS TO AVOID	*Do Not Freeze*
MATERIALS TO AVOID	*Gels and 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 aluminum, tin, lead and zinc. May react with strong oxidizing agents.*
HAZARDOUS POLYMERIZATION	*Will not occur*
HAZARDOUS DECOMPOSITION PRODUCTS	*Hydrogen gas*

11. TOXICOLOGICAL INFORMATION	
EFFECTS OF ACUTE EXPOSURE	*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.*
EFFECTS OF CHRONIC EXPOSURE	*May cause dermatitis and irritation on repeated contact.*
EXPOSURE LIMITS	*NA*
IRRITANCY	*Moderate irritation expected*
SENSITIZATION	*ND*
CARCINOGENICITY	*Not listed as a carcinogen by IARC, NTP or OSHA.*
REPRODUCTIVE TOXICITY	*ND*
TERATOGENICITY	*ND*
MUTAGENICITY	*ND*
TOXICOLOGICALLY SYNERGISTIC PRODUCTS	*ND*

12.ECOLOGICAL INFORMATION	
MOBILITY	*Sinks and mixes with water. Diluted material rapidly depolymerizes to yield dissolved silica in a form that is indistinguishable from natural dissolved silica.*
PERSISTENCE/DEGRADABILITY	*This product is not persistent in aquatic systems, but its high pH when undiluted or unneutralized is harmful to aquatic life. Full ecological impact has not been determined.*
BIO-ACCUMULATION	*Neither silica nor sodium will appreciably bioconcentrate up the food chain.*
ECOTOXICITY	*The following data is reported for sodium silicate on a 100% basis:* *A 96 hour median tolerance for: Fish (Gambusia affnis) of 2320 ppm; Water fleas (Daphnia magna) of 247 ppm; Snail eggs (Lymnea) of 632 ppm; (Amphipoda) of 160 ppm.*
RESULTS of PBT and vPvB Assessment PBT: N/A **vPvB**: N/A	

13. DISPOSAL CONSIDERATIONS	
PRODUCT DISPOSAL	*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.*
CONTAINER DISPOSAL	*Labels should not be removed from containers until they have been cleaned. Empty containers may contain hazardous residues. Dispose of containers with care.*
UNCLEANED PACKAGINGS **Recommendation:** Disposal must be made according to official regulations	

14. TRANSPORTATION INFORMATION	
CANADA	***TDG CLASSIFICATION***
HAZARD LABEL NOT REQUIRED	*NOT REGULATED, Keep from freezing*
EXPORT	
DOT CFR 172.101 DATA	*NOT REGULATED*
UN PROPER SHIPPING NAME	*NA*
UN CLASS	*NA*
UN NUMBER	*NA*
UN PACKAGING GROUP	*NA*
FLASH POINT	*NA*
HAZARDOUS MATERIAL	*NA*
HAZARD LABEL	*NA*
MARINE POLLUTANT	*NO*
SPECIFIC PRECAUTIONS FOR USER	*N/A*

SAFETY DATA SHEET

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION:.
CEPA STATUS (DSL) :
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by CPR.

16. OTHER INFORMATION	
HAZARD RATING (HMIS)	*HEALTH: 4 FLAMMABLITY: 5 REACTIVITY: 5* *5-MINIMAL; 4-SLIGHT; 3-MODERATE; 2-HIGH; 1-EXTREME*
KEY	*NA: No applicable information found or available* *CAS#: Chemical Abstracts Service Number* *ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration* *TLV: Threshold Limit Value PEL: Permissible Exposure Limit* *STEL: Short Term Exposure Limit* *NTP: National Toxicology Program* *IARC: International Agency for Research on Cancer R: Risk* *S: Safety* *LD50: Lethal Dose 50%* *LC50: Lethal Concentration 50%*
PREPARED BY:	*Specialty Products Group Inc.*