

Section 1: Product & Company Identification

Product Name: Nano-ceramic blade sealer

Product Codes: DK6000

Supplier:

Modern Spartan Industries Corp.

2394 Dawson Lane

Algonquin, IL 60102

info@modernspartansystems.com

Emergency Phone: (847) 669-1640

Chemical Name: Polysilazane Mixture

Chemical Family: Polymeric Resin-Solvent Blend

Chemical Formula: Proprietary Blend

Product Use: Blade coating

Section 2: Hazards Identification

Hazards classifications

HIMS rating (as packaged)

Label Standard

Routes of Entry: eyes, skin, inhalation, ingestion

Potential Health Effects

Acute Health Hazards:

- **Eyes:** May cause irritation
- **Skin:** May cause skin irritation through absorption
- **Ingestion:** Harmful if swallowed

Inhalation: May cause respiratory tract irritation. At higher vapor concentrations, inhalation may affect the central nervous system.

Chronic Health Hazards: No known application information at this time.

Medical Conditions Generally Aggravated By

Exposure: No known application information at this time.

Carcinogenicity

- **OSHA:** N/A
- **ACGIH:** N/A
- **NTP:** N/A
- **IARC:** N/A

Other: There are no known carcinogenic ingredients present at over 0.1% in this material

Section 3 Notes: Above information is based on the standard industrial use of this product. Abnormal use and contact may result in increased damage and irritation to all affected areas.

HMIS III		
HEALTH	☒	2
FLAMMABILITY		3
PHYSICAL HAZARDS		1
Personal Protection: F Gloves, Apron, Dust Respirator		

NFPA		
FIRE HAZARD		
HEALTH	2	3
REACTIVITY	1	
SPECIFIC HAZARD		

GHS Signal Word Danger

GHS Hazard Pictograms:



Section 2: Hazards Identification (cont.)

GHS Classifications:

- Physical, Flammable Liquids, 3
- Health, Aspiration hazard, 2
- Health, Skin corrosion/irritation, 2
- Health, Respiratory or skin sensitization, 1 Skin Health, Serious Eye Damage/Eye Irritation, 2 A
- Health, Specific target organ toxicity - Single exposure, 1
- Health, Specific target organ toxicity - Repeated exposure, 2
- Environmental, Hazards to the aquatic environment - Acute, 2

GHS Phrases:

- H226 - Flammable liquid and vapour
- H305 - May be harmful if swallowed and enters airways
- H315 - Causes skin irritation
- H317 - May cause an allergic skin reaction
- H319 - Causes serious eye irritation
- H370 - Causes damage to organs
- H373 - May cause damage to organs through prolonged or repeated exposure
- H401 - Toxic to aquatic life

GHS Precautionary Statements:

- P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P211 - Do not spray on an open flame or other ignition sources.
- P232 - Protect from moisture.
- P241 - Use explosion-proof electrical/ventilating/light/equipment.
- P242 - Use only non-sparking tools.
- P243 - Take precautionary measures against static discharge.
- P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
- P262 - Do not get in eyes, on the skin, or on clothing.
- P264 - Wash hands thoroughly after handling.
- P270 - Do not eat, drink or smoke when using this product.
- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.
- P281 - Use personal protective equipment as required.
- P284 - Wear respiratory protection.

Section 2: Hazards Identification (cont.)

- P301+330+331 - If swallowed: Rinse mouth. Do NOT induce vomiting.
- P302+ 352- If on skin – Wash with soap and water.
- P304+340 - If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305+351+338 - If in eyes: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
- P370+376 - In case of fire: Stop leak if safe to do so
- P370+378 - In case of fire: Use CO2, dry chemical powder, foam, or alcohol foam for extinction.
- P370+380 - In case of fire: Evacuate area.
- P374 - Fight fire with normal precautions from a reasonable distance.
- P381 - Eliminate all ignition sources if safe to do so.
- P403+233 - Store in a dry, cool, well ventilated place. Keep container tightly closed.
- P411 - Store at temperatures not exceeding 25 °C/77 °F.
- P501 - Dispose of contents/container to a licensed waste facility.

NOTE: tert Butyl acetate is listed as a VOC Exempt solvent.

Section 3: Composition/Information on Ingredients

- **Ingredient:** Ingredients that are identified as toxic via the SARA guidelines are listed below per section 313 of the 40CFR372

Cas No.	Content %	Chemical Name
9006-65-9	18% - 30%	Polysilazane proprietary mixture
540-88-5	25% - 40%	Tert-Butyl Acetate or similar VOC exempt solvent blends

Section 3 Notes: Ingredients not listed are not listed in the SARA classification and are deemed proprietary.

Section 4: First Aid Measures

- **Eyes:** Immediately flush with water for at least 15 minutes. If irritation persists, seek medical attention.
- **Skin:** Wash the contact area thoroughly with soap and water. Washing clothing separately from other garments. If irritation persists, stop using garments and seek medical advice.
- **Ingestion:** DO NOT induce vomiting. Seek immediate medical attention.
- **Inhalation:** Remove to fresh air. If breathing is difficult, have trained personnel administer oxygen and seek immediate medical attention.
- **Notes to Physicians or First Aid Providers:** Administration of absorbents may be of value.
- **Section 4 Notes:** Always wear protective eyewear, gloves, and clothing when handling any chemical.

Section 5: Fire-Fighting Measures

- **Flammability:** Class B Flammable Liquid
- **Extinguishing Media:** Carbon dioxide, dry chemical powder, extinguishing form media
- **Special Fire-Fighting Procedures:** Evacuate all unnecessary personnel. Shut down all electrical devices in exposed areas. Use water to keep adjacent containers cool to prevent pressure build-up. Wear self-contained breathing apparatus and full protective clothing.
- **Unusual Fire and Explosion Hazards:** Container explosion may occur under fire conditions. Toxic fumes from container may be emitted under fire conditions.
- **Hazardous Decomposition Products:** Chlorine-containing gas, Fluorine containing gas, may be discharged upon decomposition.
- **Section 5 Notes:** Avoid static charge build-up. Static charge could ignite heavy vapors.

Section 6: Accidental Release Measures

- **Accidental Release Measures:** Determine to evacuate or isolate the area according to your local emergency plan. For large spills, supply emergency diking to contain materials. After removal of bulk material, the use of an absorbent is needed for final clean up. Remove waste materials to a location per your local waste management regulations state or Federal regulations.
- **Section 6 Notes:** Always wear personal protective equipment when handling all types of chemicals and waste products. Refer to section 8 for Personal protective equipment.

Section 7: Handling & Storage

- **Handling & Storage:** Store in cool dry location with adequate ventilation. Do not store in direct sunlight. Keep containers tightly sealed when not in use. Avoid leaving open containers during use. Store in temperatures between 55F and 80F.
- **Other Precautions:** Always wear protective clothing when handling all chemicals. See section 8 for details.
- **Section 7 Notes:** Do not smoke when handling materials. Keep away from moisture and standing water.

Section 8: Exposure Controls/Personal Protection

- **Engineering Controls:** Local and general ventilation is recommended.
- **Respiratory Protection:** Use respiratory protection unless adequate ventilation is in place and has been assessed to provide proper air movement for recommended exposure. Follow OSHA requirements for respirator regulations 29CFR 1910.134.
- **Eye Protection:** Always wear protective eyewear or goggles. Recommended use of a full-face respirator or large volume handling and spills.
- **Skin Protection:** Chemical protective gloves is always recommended. Wash exposed skin immediately if contact with chemical occurs.
- **Other Protective Clothing or Equipment:** The use of chemical-resistant aprons, shoe covers, and face shields is recommended for any handling of chemicals.
- **Work Hygienic Practices:** The use of proper cleaning soaps and solutions for all body parts is recommended. Eyewash stations and showers in accordance with OSHA and local safety regulations are advised and in close proximity.
- **Exposure Guidelines:** Refer to sections 4, 7, and 8 for contact and exposure recommendations.
- **Section 8 Notes:** Note all of these precautions are based on room temperature handling. Elevated temperatures may increase the need for extra care in the handling of materials.

Section 9: Physical & Chemical Properties

- **Appearance:** Clear
- **Odor:** Strong solvent to ammonia / naphthalenic
- **Physical State:** Liquid
- **Solubility:** reacts with water
- **Total Non-exempt VOC Compounds:** 0.0 g/L
 - Solvents used within this product are VOC Exempt per 40CFR51.100(s).
- **Molecular Weight:** <55ps
- **Viscosity:** 12-17 seconds (#2 Zahn Cup)

Section 10: Stability & Reactivity

- **Stability:** STABLE
- **Incompatibility (Material to Avoid):** Oxidizers, Isocyanates, water, protic solvents, mineral acids and alkalies.
- **Hazardous Decomposition or By-Products:** Chlorine-containing gasses, Fluorine-containing gasses, Carbon Monoxide, Carbon Dioxide, and Silicon Dioxide.
- **Hazardous Polymerization:** Will not occur
- **Conditions to Avoid (Polymerization):** N/A
- **Section 10 Notes:** The above criteria may not be all the materials that affect stability, but per testing, the above information is true to the best of our knowledge.

Section 11: Toxicological Information

- **Toxicological Information:** Not listed as a carcinogen by NTP (National Toxicology Program); not regulated as a carcinogen by OSHA (Occupational Safety and Health Administration); not evaluated by IARC (International Agency for Research on Cancer)
- **Section 11 Notes:** No human studies have been conducted with this material. The use of recommended protective equipment should reduce or prevent any adverse effects.

Section 12: Ecological Information

- **Ecological Information:** This material is listed as a water hazard category 2: and may be hazardous to aquatic organisms. Avoid release to surface waters and waste treatment systems.

Section 13: Disposal Considerations

- **Waste Disposal Method:** Do not mix this product with aqueous or other protic waste streams. Incinerations of combustible waste materials in a permitted facility in accordance with the local, state, and federal regulations is the recommended disposal method.
- **RCRA Hazard Class:** I / Ignitable
- **Section 13 Notes:** Local and state regulations may exceed federal standards. Always consult your local waste authority for proper disposal requirements.

Section 14: Transport Information

U.S. DEPARTMENT OF TRANSPORTATION

- **Proper Shipping Name:** Paint Related Materials
- **Hazard Class:** 3
- **UN Number:** 1263
- **Packing Group:** III
- **Label Statement:** Flammable liquid

WATER TRANSPORTATION

- **Proper Shipping Name:** Paint Related Materials
- **Hazard Class:** 3
- **UN Number:** 1263
- **Packing Group:** III
- **EmS No.:** 30 S-E, F-E
- **Label Statements:** Flammable Liquid



AIR TRANSPORTATION

- **Proper Shipping Name:** Paint Related Materials
- **Hazard Class:** 3
- **UN Number:** 1263
- **Packing Group:** III
- **Label Statement:** Flammable liquid

CONSUMER COMMODITY

- **ID Number:** 8000
- **Hazard Class:** 9
- **Label Statement:**
- **Label ORM-D Domestic:**
- **Section 14 Notes:** Labels to match on both SDS and Packaging as required.



Section 15: Regulatory Information

U.S. FEDERAL REGULATIONS

- **TSCA (Toxic Substance Control Act):** All chemical substances in this material are on or exempted from the listing on the TSCA Inventory of Chemical Substances.
- **CERCLA (Comprehensive Response Compensation, and Liability Act):** None
- **SARA TITLE III (Superfund Amendments and Reauthorization Act):** None
- **311/312 Hazard Categories:**
 - Acute: No
 - Chronic: No
 - Fire: Yes
 - Pressure: No
 - Reactive: No
- **313 Reportable Ingredients:** Non present or none present in regulated quantities.
- **State Regulations:** Exempt list per 40CFR51.100(s).
- **International Regulations:** Subject to specific country, province, state or district regulations.

Section 16: Other Information

Revision date: 11/28/2018 (rev 2)

U.S. Federal Regulations:

OSHA Standard 29 CFR 1910.1200 requires that information be provided to employees regarding the hazards of chemicals by means of hazard communication program including labeling, material safety data sheets, training and access to written records. We request that you (as it is your legal duty to) make all information in this Safety Data Sheet available to all your employees.