NanoPave® JSS

2-in-1 Joint Stabilizer & Sealer

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TechniSoil Global Inc. encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

1. IDENTIFICATION

Product name: NanoPave® JSS

Recommended use of the chemical and restrictions on use

Identified uses: Joint Stabilizer & Sealer

COMPANY IDENTIFICATION

TechniSoil Global, Inc. 5660 Westside Road Redding, CA, USA 96001

Customer Information Number

Toll Free: 877-356-2250

EMERGENCY TELEPHONE NUMBER

24-Hour Emergency Contact: 800-424-9300 Local Emergency Contact: 800-424-9300

2. HAZARD IDENTIFICATION

Hazard classification

Eyes: Direct contact with material can cause the following: slight irritation

Skin: Prolonged or repeated skin contact can cause the following: slight irritation Inhalation: Inhalation of

vapor or mist can cause the following: irritation of nose, throat, and lungs headache nausea

Label elements: Not Applicable Hazard pictograms: Not Applicable

Signal word: None

Hazards

Inhalation of vapor or mist can cause headache, nausea and irritation of the nose, throat, and lungs. May cause eye and skin irritation

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Other hazards

Hazardous decomposition products including hydrogen fluoride and other toxic fluorinated compounds may be formed at high temperatures and during combustion. Inhalation of these compounds may result in serious lung irritation. Excessive exposure could result in delayed pulmonary edema in some cases, and on very high exposure, damage to the liver and kidneys.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical nature:

Proprietary Nano-Polymer Blend 7.5% - 40% Water 60%-92.5%

4. FIRST AID MEASURES

Description of first aid measures

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Skin contact: Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Eye contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Ingestion: Drink 1 or 2 glasses of water. Consult a physician if needed

Most important symptoms and effects, both acute and delayed: Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

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Indication of any immediate medical attention and special treatment needed

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Notes to physician: No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: No data available

Special hazards arising from the substance or mixture

Hazardous combustion products: Formation of toxic gases including hydrofluoric acid, perfluoroisobutylene, and carbonyl fluoride is possible during heating or in case of fire. **Unusual Fire and Explosion Hazards:** Material can splatter above 100°C/212°F. Dried product can burn.

Advice for firefighters

Fire Fighting Procedures: No data available.

Special protective equipment for firefighters:

Use NIOSH/MSHA approved SCBA and bunker gear. Evolution of acidic gases may require complete wash down of protective clothing prior to removal.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Ensure cleanup is done only by trained personnel wearing appropriate personal protective equipment. Ventilate area and cover with absorbent material. Collect spilled material in a container and seal. Spilled material is a slipping hazard.

Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

Methods and materials for containment and cleaning up: Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

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7. HANDLING AND STORAGE

Precautions for safe handling: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Keep container tightly closed. Do not breathe vapors, mist or gas. Further information on storage conditions: Keep from freezing - product stability may be affected. Stir well before use.

Storage stability: N/A

Storage temperature: 40 - 90 °F (4.44 - 32.2 °C)

Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required. NOTE: Formaldehyde will be generated under acidic conditions. Maintain adequate ventilation under these conditions to prevent exposure to formaldehyde above the Rohm and Haas Co. recommended ceiling of 0.3 ppm.

Keep away from heat, steam, sunlight, sparks and open flame. Store containers tightly closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Limits: No exposure limits available for this product. Excessive exposure to thermal degradation products could result in delayed pulmonary edema in some cases, and on very high exposure, damage to the liver and kidneys. These substances may include: perfluoroisobutylene (TLV = 0.01 ppm Ceiling), carbonyl fluoride (TLV = 2 ppm TWA, 5 ppm STEL), hydrogen fluoride (TLV = 2 ppm Ceiling, 0.5 ppm TWA).

Exposure controls

Engineering controls: Use local exhaust ventilation with a minimum capture velocity of 100 ft/min. (0.5 m/sec.) at the point of vapor evolution. Refer to the current edition of Industri- al Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and main-tenance of exhaust systems.

Individual protection measures

Eye Protection: Safety glasses with side-shields Eye protection worn must be compatible with respiratory protection system employed.

Hand Protection: The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

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Other protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task. Eyewash station and safety shower.

Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. For airborne concentrations up to 10 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) N95 filters. If oil mist is present, use R95 or P95 filters.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	
Physical state	Liquid
Color	White, Milky
Odor	Acrylic
Odor Threshold	No data available
рН	6.0 - 8.0
Melting point/range	0 °C (32 °F)
Freezing point	No data available
Boiling point (760 mmHg)	100 °C (212.00 °F) Water
Flash point	Noncombustible
Evaporation Rate (Butyl Acetate = 1)	<1.00 Water
Flammability (solid, gas)	Not available
Lower explosion limit	Not Applicable
Upper explosion limit	Not Applicable

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Vapor Pressure	17.0 mmHg at 20 °C (68.00 °F) Water
Relative Vapor Density (air = 1)	<1.0 Water
Relative Density (water = 1)	1.00 - 1.20
Water solubility	Miscible
Partition coefficient: n- octanol/water	No data available
Auto-ignition temperature	Not applicable
Decomposition temperature	No data available
Dynamic Viscosity	80-400 mPa.s maximum
Kinematic Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available
Molecular weight	No data available
Percent volatility	37 - 39 % Water

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

Reactivity: No data available Chemical stability: Stable

Possibility of hazardous reactions: Product will not undergo polymerization. Conditions to avoid: Keep away from heat, sparks, flame, high temperature

Incompatible materials: May react with metals, such as sodium, magnesium, aluminum at elevated temperatures (above 425 C); may react upon prolonged exposure to fluorine or in oxygen-fluorine mixtures at high temperatures and pressures. Contact with incompatible materials may result in fire or explosion.

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Hazardous decomposition products: Decomposition or by-products and toxic by-products including hydrofluoric acid, perfluoroisobutylene, and carbonyl fluoride may be formed at very high temperatures.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity

May be harmful if swallowed For this family of materials: LD50 rat > 5,000 mg/kg

Acute dermal toxicity

May cause skin irritation

LD50 rabbit > 5,000 mg/kg

Acute inhalation toxicity

May cause respiratory irritation

Skin corrosion/irritation

May cause skin irritation

Serious eye damage/eye irritation

No eye irritation

Sensitization

Skin by Local Lymph Node Assay (mouse): Negative

Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

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Specific Target Organ Systemic Toxicity (Repeated Exposure)

No relevant data found.

Carcinogenicity

None of the components in this material are listed by NTP, OSHA or IARC.

Teratogenicity

No relevant data found.

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Reproductive toxicity

No relevant data found.

Mutagenicity

For this family of materials: In vitro genetic toxicity studies were negative.

Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

12. ECOLOGICAL INFORMATION

Persistence and degradability

Biodegradability: No data

Bioaccumulative potential

Bioaccumulation: No data

13. DISPOSAL CONSIDERATIONS

Disposal methods: Comply with Federal, State and Local regulations concerning health and environment when disposing of materials. Regulations may also apply to empty containers, liners, or rinsate. DO NOT INCINERATE unless incinerator is capable of scrubbing hydrogen fluoride and other acidic combustion products.

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14. TRANSPORT INFORMATION

DOT: Not regulated for transport

Classification for SEA transport (IMO-IMDG): Not regulated (Not hazardous)

15. REGULATORY INFORMATION

EINECS 1987 List

Fluoroalkyl methacrylate is registered by the listing of its constituent monomers.

United States TSCA Inventory (TSCA)

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All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory. The base polymer is subject to export notification under Section 12(b) of TSCA.

Other Countries

The fluoropolymer of this product is listed on the chemical inventories of the following countries: Japan, Korea, Taiwan, and Switzerland.

China: Not Listed

State and local regulations may have specific requirements for this product or components of this product; consult specific state and local regulatory requirements for additional information.

16. OTHER INFORMATION

For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components, Fluoropolymers Safe Handling Guide published by The Society of the Plastics Industry, and the DOT Emergency Response Guidebook.

The product is for the industrial use only. We do not guarantee the safety in case the product is used for the other purposes. When using the product for healthcare application or food/feed application, consult us in advance.

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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