



**ADMIRAL-SPACEMAKER, INC.**



c/o: FLEMING PLLC  
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## **EMERGENCY CONTACT**

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## **MATERIAL SAFETY DATA SHEET (MSDS)**

MSDS:AS-01      REVISION:06/01/2015.

**Page 1 of 10.**

### **SECTION 1. MATERIAL IDENTITY**

PRODUCT NAME: SpaceMaker™ Outdoor Flooring.  
COLORS: Tropical Brown  
Nantucket Grey  
CHEMICAL NAME: Expanded Poly Vinyl Chloride (PVC).  
Vulcanized Silicone.  
COMMON NAME: Poly Vinyl Resin with functional additives.  
Silicone Rubber.

### **SECTION 2. COMPONENT INFORMATION**

COMPOSITION: This MSDS applies to a range of outdoor flooring product profiles manufactured in a variety of colors and with potentially minor property variations. Major constituents are compiled in Section 2, however the precise formulation is proprietary. In addition to pure virgin PVC the product may contain minor quantities of proprietary components including Process Aids, Stabilizers, Plasticizers, Lubricants, Blowing Agents, Property Enhancers and Pigments. Seal material is virgin, high-temperature vulcanized Silicone with minor quantities of Pigments and Foaming Agents.

**Page 2 of 10.**

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

**SECTION 3. HAZARDS IDENTIFICATION**

**GENERAL HAZARD STATEMENT:** This manufactured product is classified as an “Article” as defined under Occupational Safety and Health Administration (OSHA) Hazard Communication criteria, and is thus exempt from the MSDS requirement. The solid profile presents no health risk in solid form. Processing that generates significant quantities of airborne dust or thermal decomposition products should be performed in well-ventilated areas, and if appropriate, respiratory protection and other Personal Protective Equipment (PPE) should be utilized. During sawing and cutting the profiles, wear protective eye glasses and breathing mask to prevent inhalation of fine dust.

**HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS) DESIGNATION:** Health 1 Flammability 0 Reactivity 0 PPE B  
**WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM CLASSIFICATION (WHMIS Canada).** Based on USA’s National Fire Protection Association (NFPA 704):

- Health:
  - 0 - (Solid Product) Ambient conditions, no health risk.
  - 3 - (Fire Conditions) Acute exposure to thermal decomposition product (Hydrogen Chloride gas) can cause serious temporary or permanent injury. The greatest hazard associated with combustion of carbonaceous materials involves exposure to carbon monoxide (CO) and oxygen-deficient atmosphere.
- Flammability:
  - 0 - Chlorine component provides self-extinguishing properties. (May melt and liberate Hydrogen Chloride gas and other thermal decomposition products under fire conditions).
- Reactivity:
  - 1 - (Fire Conditions) Normally stable but can liberate Hydrogen Chloride gas and other thermal decomposition products at elevated temperatures.

**Primary Route of Entry:** Inhalation of airborne dust or thermal decomposition products. No health risk under normal conditions of use.

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

Acute Effects of Overexposure:

- Inhalation - Exposures to high concentrations of airborne dust may result in respiratory irritation and other toxic effects. Thermal decomposition products are corrosive/toxic and are potent eye, nose, throat and respiratory irritants.
- Eye - Direct eye contact exposure to high concentrations of airborne dust may cause irritation (mechanical abrasion) and conjunctivitis.
- Skin - Prolonged, repeated exposure to high airborne dust concentrations may cause irritation or sensitization, possibly leading to dermatitis.
- Ingestion - Not an anticipated route of exposure. Harmful if swallowed. Ingestion of dust in large quantities may cause nausea and/or vomiting. Other serious effects may occur if large amounts of product are swallowed.

Chronic Effects of Overexposure:

- Excessive & Repeated Exposures to Airborne Dust May Cause:
  - Allergic sensitization/dermatitis among sensitive individuals with pre-existing conditions.
  - Respiratory irritation and inflammation.
  - Eye inflammation and irritation of mucous membranes (mechanical abrasion).
- Carcinogenicity:
  - The carcinogenicity of this product as a whole has not been tested. Extensive long-term usage of PVC resins has exhibited no documented carcinogenic effects.

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

- Synergistic Materials:
  - None known.
  
- Signs and Symptoms of Overexposure:
  - (Airborne Dust) Irritation of skin and eyes; respiratory irritation; dermatitis.
  
- Medical Conditions Generally Aggravated by Exposure:
  - Pre-existing allergies and respiratory disorders may be exacerbated by airborne dust.

#### **SECTION 4. FIRE AID MEASURES**

Inhalation - Extreme dust exposure may block respiratory passages. If overexposure occurs, immediately remove victim from the adverse environment to fresh air and seek medical attention. If breathing has stopped, certified individuals should perform Cardiopulmonary Resuscitation (CPR). Keep affected person warm and at rest.

Eye - Treat as an abrasive foreign material. Flush with large amounts of running water for several minutes.

Skin - If dust gets on skin, wash contaminated area with soap and water. If a persistent rash or irritation occurs, seek medical attention. Launder contaminated clothing prior to re-use.

Ingestion - Ingestion of significant quantities is unlikely. Swallowing of large amounts of material may cause nausea. If vomiting occurs, keep head below hips to help prevent aspiration. Seek medical attention immediately.

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

**SECTION 5. FIRE FIGHTING MEASURES**

FLASH POINT:	N/A
FLAMMABLE LIMITS:	N/A
AUTO-IGNITION TEMPERATURE:	N/A
FLAMMABILITY CLASSIFICATION:	N/A
GENERAL FIRE HAZARD	N/A Product may emit hydrogen chloride and carbon monoxide under combustion conditions.

PVC is inherently flame retardant, but like all materials, when exposed to live flame catches fire.

Extinguishing Method - Water spray, CO<sub>2</sub>, ABC Dry Chemical, Protein Type Air Foams, Dry Powder Extinguisher

Fire Fighting Equipment - As appropriate for surrounding material and toxic airborne gases. Respiratory protection against hydrogen chloride, carbon dioxide and oxygen deficiency. Positive pressure Self Contained Breathing Apparatus (SCBA) and structural firefighter's protective clothing should be used for fighting large fires.

Unusual Fire or Explosion Hazards - Not a significant fire or explosion hazard. Exposure to fire and high temperature will result in thermal decomposition and emission of hydrogen chloride and other toxic gases. Note: If mechanical processing of product (sawing, milling, routing etc.) produces large quantities of fine airborne dust, please refer to NFPA 64.

Explosion Data - Sensitivity/Mechanical Impact: N/A Sensitivity/Static Discharge: N/A.

Hazardous Combustion Products - Hydrogen chloride, carbon monoxide and other toxic gases may be evolved from fires involving this product.

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Notification Procedures - None.

Procedures if Material is Released or Spilled - Where dusty conditions are created as a result of cutting or sawing, wet dust down then sweep or vacuum for disposal. Personnel performing cleanup must use protective equipment. Transfer cutoff waste material or dust to appropriate containers for storage, recycle or disposal. Comply with federal, state and local regulations regarding waste disposal. Recycling of unused material is recommended.

**SECTION 7. HANDLING AND STORAGE**

Handling - If airborne dust is generated, take necessary precautions to avoid inhalation of excessive dust, including ventilation and respiratory protection. Remove any dust generated as a result of sawing/handling of the profiles to eliminate breathing hazards. SpaceMaker™ outdoor flooring products are not intended for load bearing or heavy structural applications. Please consult Admiral™ company literature for proper usage. Admiral™ products are heavier than some traditional lumber products, proper handling is required to prevent damage or injury. Do not burn in fireplace or use as firewood. As with any product, handle with care to avoid cuts from sharp edges of the profiles.

Storage - Store in clean, dry, ventilated area away from heat and ignition sources. Sprinkled warehouse areas are recommended. The product by itself will not support combustion, however materials such as wooden pallets, paper bags, cardboard boxes and other combustibles can provide sufficient fuel to cause the product to burn. Avoid exposure to organic solvents. Avoid temperatures in excess of 150 deg F.

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

**SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Ventilation: Use in well-ventilated area or provide general dilution ventilation and /or local ventilation during processing that generates airborne dust. Avoid excessively high temperatures to prevent decomposition and formation of toxic gases.

Respiratory Protection: Product is non-volatile. Airborne dust may be generated during handling and mechanical processing. Vapor and aerosol emissions may occur at high temperatures. When engineering or administrative controls cannot maintain exposures below permissible limits, use an appropriate National Institute for Occupational Safety and Health / Mine Safety and Health Administration (NIOSH/MSHA) approved respirator. If respiratory protection is required, all appropriate requirements as set forth in 29 Code of Federal Regulations (CFR) 1910.134 (1998 revision) must be met. A competent health and safety professional should be consulted for respirator selection, fit testing and training. Use a NIOSH-approved positive-pressure, air supplied respirator if exposure levels are unknown, or during any other circumstance where an air-purifying respirator would not be adequate.

Eye Protection: Safety glasses with side shields, or goggles, should be worn to protect against dust particles.

Skin Protection: No special equipment required. Good personal hygiene practices should always be followed. Use gloves suitable to protect hands from prolonged exposure to dust that may be generated during processing.

Other Protective Clothing or Equipment: Adequate footwear (safety shoes, if necessary) and clothing that protects skin from prolonged or repeated contact with dust. Clothing change and/or laundering are recommended if extensive dust contamination occurs.

**ADMIRAL-SPACEMAKER, INC.**  
**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Specific Gravity (H <sub>2</sub> O = 1):	Less than 1.0
Solubility in Water:	Insoluble
Melting Point:	Softens above 175 degrees F
Appearance and Odor:	Odorless solid

**SECTION 10. STABILITY AND REACTIVITY**

Stability (Thermal, Light, Etc.): Stable under normal conditions. Decomposes at high temperature (fire conditions) to release toxic hydrogen chloride gas.

Conditions to Avoid: Avoid excessive heat and flame. Product may distort or soften and fuse together at temperatures above 175 degrees F and will undergo decomposition under fire/combustion conditions. Avoid build-up of dusts from processing.

Incompatibility (Materials to avoid): Avoid contact with organic solvents.

Hazardous Decomposition Products: Hazardous decomposition products (hydrogen chloride and other toxic substances) may be emitted at high temperatures /fire conditions.

Hazardous Polymerization: Will not occur.



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**SPACEMAKER™ OUTDOOR FLOORING**  
**MSDS AS-01**

**SECTION 11. ECOLOGICAL DATA**

Extensive usage of PVC profiles has not resulted in major ecological concerns.

**SECTION 12. DISPOSAL CONSIDERATIONS**

Waste Disposal Method: Waste should be disposed, processed or recycled in accordance with federal, state and local regulations. Recycling of waste material is recommended. Incineration is not recommended unless provisions are made to contain emissions of hydrogen chloride and other decomposition products.

**DISCLAIMER:**

**Details presented in this MSDS were derived from literature sources and regulatory documents believed to be accurate and authoritative. Information given herein is offered in good faith as accurate, but without guarantee. The purpose of the MSDS is to serve as a general guide to users of this product. The user must satisfy requirements of the OSHA Hazard Communication Standard 29CFR 1910.1200 and any other applicable occupational health and environmental regulations. This MSDS is not intended as a total regulatory compliance document, nor should it be construed as a license or a recommendation to violate any law or infringe on any patent.**

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SPACEMAKER™ OUTDOOR FLOORING  
MSDS AS-01**

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