

# Material Safety Data Sheet



## Urea Formaldehyde (UF) Bonded Products

Marshfield DoorSystems  
1401 E Fourth St  
Marshfield WI 54449

Emergency Phone: (715) 486-2286  
Additional Information: (715) 486-2286

### 1. Product Identification

Product	Manufacturing Location
Door Core Particleboard	Marshfield, WI

Synonyms: Particleboard door core

### 2. Hazardous Ingredients/Identity Information

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Wood	None	85-94	OSHA OSHA ACGIH ACGIH ACGIH  Recommended <sup>1</sup> Recommended <sup>1</sup> Recommended <sup>1</sup>	PEL-TWA 15 mg/m3 PEL-TWA 5 mg/m3 TLV-TWA 5 mg/m3 TLV-STEL 10 mg/m3 TLV-TWA 1 mg/m3  PEL-TWA 5 mg/m3 PEL-STEL 10 mg/m3 PEL-TWA 2.5 mg/m3	Total dust Respirable dust fraction Softwood total dust Softwood total dust Selected hardwood total dust (beech, oak, others) Softwood or hardwood total dust Softwood or hardwood total dust Western red cedar total dust
Urea formaldehyde resin solids <sup>2</sup>	9011-05-6	4-15	OSHA OSHA ACGIH	PEL-TWA 0.75 ppm PEL-STEL 2 ppm TLV- Ceiling 0.3 ppm	Free gaseous formaldehyde Free gaseous formaldehyde Free gaseous formaldehyde
Paraffin wax	8002-74-2	0-1	OSHA ACGIH	PEL-TWA 2 mg/m3 TLV-TWA 2 mg/m3	Paraffin wax fume Paraffin wax fume

<sup>1</sup> Marshfield DoorSystems recommended exposure limits based on 1989 OSHA PELs. In 1992, the U.S. Court of Appeals for the Eleventh Circuit Court overturned OSHA's 1989 Air Contaminants Rule, which included specific PELs for wood dust established by OSHA at that time. Wood dust is now officially regulated as an organic dust in a category known as "Particulates Not Otherwise Regulated" (PNOR), or Nuisance Dust. However, a number of states have incorporated the OSHA PELs from the 1989 standard in their state plans. Additionally, OSHA has announced that it may cite companies under the OSH Act general duty clause under appropriate circumstances for noncompliance with the 1989 PELs.

<sup>2</sup> Contains less than 0.1% free formaldehyde.

### 3. Hazard Identification

**Appearance and Odor:** A matrix of light brown or buff-colored interlocking wood fibers/particles/flakes and UF resin solids having a slightly aromatic odor. The wood component of these products may consist of alder, aspen, beech, birch, cottonwood, fir, gum, hemlock, hickory, maple, oak, pecan, pine, poplar, spruce, walnut, and/or Western red cedar.

### 3. Hazard Identification (cont.)

**Primary Health Hazards:** The primary health hazards posed by these products are thought to be due to exposure to wood dust or free gaseous formaldehyde.

**Primary Route(s) of Exposure:**

- Ingestion:
- Skin: Dust
- Inhalation: Dust or gas

**Medical Conditions Generally Aggravated by Exposure:** Gaseous formaldehyde or wood dust may aggravate preexisting respiratory conditions or allergies.

**Chronic Health Hazards:** Wood dust, depending on the species, may cause allergic contact dermatitis and respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels. Prolonged exposure to wood dust has been reported by some observers to be associated with nasal cancer.

**Carcinogenicity Listing:**

- NTP: Formaldehyde, Group 2, A & B
- IARC Monographs: Formaldehyde, Group 2A; Wood dust, Group 1
- OSHA Regulated: Formaldehyde

**IARC - Group 2A:** Probably carcinogenic to humans; limited human evidence and sufficient evidence in experimental animals. Studies of cancer incidence among workers in a wide variety of occupations have failed to convincingly show carcinogenic activity of formaldehyde in humans. Gaseous formaldehyde has been shown to cause cancer in certain laboratory animals after long-term exposure to very high concentrations (14+ ppm), far above those normally found in the workplace with this product.

**IARC - Group 1:** Carcinogenic to humans; sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma of the nasal cavities and paranasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum.

**NTP - Group 2:** Reasonably anticipated to be a carcinogen. **A)** Limited evidence of carcinogenicity from studies in humans which indicates that causal relationship is credible. **B)** Sufficient evidence of carcinogenicity from studies in experimental animals.

### 4. Emergency and First-Aid Procedures

**Ingestion:** Not applicable under normal use.

**Eye Contact:** Gaseous formaldehyde may cause temporary irritation or temporary burning sensation. Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particles. Get medical help if irritation persists.

**Skin Contact:** High concentrations of gaseous formaldehyde may cause allergic contact dermatitis in sensitized individuals resulting in redness, itching, and occasionally, hives. Wood dust of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation. These products may be irritating to the skin from drying or mechanical abrasion experienced during frequent handling. Get medical help if rash, irritation, or dermatitis persists.

**Skin Absorption:** Not known to occur under normal use.

**Inhalation:** Gaseous formaldehyde may cause temporary irritation to the nose and throat. Wood dust may cause obstruction in the nasal passages, resulting in dryness of nose, dry cough, sneezing, and headaches. Remove to fresh air. Get medical help if persistent irritation, severe coughing or breathing difficulty occurs.

### 5. Fire and Explosion Data







