1 Product Identification

Manufacturer Name and Address:

Collins Products LLC
6410 Highway 66
Klamath Falls, OR 97601
Emergency Phone: 541.885.3214
Phone of Additional Information: 541.885.3303

Product Name: Hardboard
Synonyms(s): None
Prepared By: Environmental, Safety, & Health Services
Date Prepared: 11/99
Date Revised: 4/1/10
MSDS#: CPFK-0004

2 Hazardous Ingredient & Identity Information

<table>
<thead>
<tr>
<th>Name/CAS#</th>
<th>%</th>
<th>Exposure Limits*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood</td>
<td>90-91</td>
<td>OSHA PEL-TWA 5 mg/m^3 (a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV-TWA 5 mg/m^3 (b)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV-STEL 10 mg/m^3 (c)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TLV-TWA 1 mg/m^3 (d)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>Resin Solids</td>
<td>5-6</td>
<td>OSHA PEL-TWA 1 ppm (e)</td>
</tr>
<tr>
<td>Phenol formaldehyde</td>
<td>None</td>
<td>ACGIH TLV-TWA 2 ppm (f)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other</td>
</tr>
<tr>
<td>Wax</td>
<td>2-3</td>
<td>OSHA PEL-TWA None</td>
</tr>
<tr>
<td>CAS# 8002-74-2</td>
<td></td>
<td>ACGIH TLV-TWA 2 mg/m^3 (h)</td>
</tr>
<tr>
<td>Water based primer</td>
<td>1-2</td>
<td>OSHA PEL-TWA None</td>
</tr>
<tr>
<td>or sealer</td>
<td></td>
<td>ACGIH TLV-TWA None</td>
</tr>
<tr>
<td>Top spray –</td>
<td>&lt;1</td>
<td>OSHA PEL-TWA 1 ppm (f)</td>
</tr>
<tr>
<td>Melamine</td>
<td></td>
<td>OSHA PEL-STEL 2 ppm (f)</td>
</tr>
<tr>
<td>Formaldehyde</td>
<td></td>
<td>ACGIH TLV-TWA 1 ppm (f)</td>
</tr>
<tr>
<td>CAS# None</td>
<td></td>
<td>OTHER</td>
</tr>
</tbody>
</table>

(a) Alder, aspen, beech, cotton wood, fir, gum hemlock, hickory, maple, oak, pines, poplar, spruce, and/or western red cedar.
(b) Softwood dust 8-hour TWA
(c) Selected hardwoods (oak, beech) 8-hour TWA
(d) Softwood total dust 15 minute STEL
(e) Some states use an 8-hour PEL-TWA of 10.0 mg/m^3 for wood Dust. Washington has established an 8-hour PEL-TWA of 5.0 mg/m^3 for non-allergenic and 2.5 mg/m^3 for allergenic wood dust.
(f) As free formaldehyde
(g) Washington ceiling for formaldehyde is 1 ppm, Oregon 8-hour PEL-TWA for formaldehyde is 2 ppm.
(h) As paraffin fume wax.

3 Physical/Chemical Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILING POINT (1 atm)</td>
<td>N/A</td>
</tr>
<tr>
<td>VAPOR PRESSURE (mm Hg)</td>
<td>N/A</td>
</tr>
<tr>
<td>VAPOR DENSITY (Air=1; 1 atm)</td>
<td>N/A</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY (H_2O=1)</td>
<td>0.40-0.80</td>
</tr>
<tr>
<td>MELTING POINT</td>
<td>N/A</td>
</tr>
<tr>
<td>EVAPORATION RATE (Butyl Acetate=1)</td>
<td>N/A</td>
</tr>
<tr>
<td>SOLUBILITY IN WATER % by Weight:</td>
<td>&lt;0.1%</td>
</tr>
<tr>
<td>% VOLATILE BY VOLUME:</td>
<td>0</td>
</tr>
</tbody>
</table>

4 Fire and Explosion Hazard Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLASH POINT (*°F or °C)</td>
<td>N/A</td>
</tr>
<tr>
<td>FLAMMABLE LIMITS:</td>
<td></td>
</tr>
<tr>
<td>LEL:</td>
<td>N/A</td>
</tr>
<tr>
<td>UEL:</td>
<td>N/A</td>
</tr>
<tr>
<td>EXTINGUISHING MEDIA:</td>
<td>Water, carbon dioxide, sand</td>
</tr>
<tr>
<td>AUTOIGNITION TEMPERATURE:</td>
<td>400°F-500°F (204°C-260°C).</td>
</tr>
<tr>
<td>SPECIAL FIRE FIGHTING PROCEDURES:</td>
<td>None</td>
</tr>
<tr>
<td>UNUSUAL FIRE AND EXPLOSION HAZARDS:</td>
<td>Depending on moisture content, and more importantly, particle diameter, wood dust may explode in the presence of an ignition source. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts.</td>
</tr>
</tbody>
</table>

5 Reactivity Data

Stability: ( ) Unstable (x) Stable

Conditions to Avoid: N/A

Incompatibility (Material to avoid): Avoid contact with oxidizing agents. Avoid open flames. This product may ignite at temperatures in excess of 400°F (204°C).
Hazardous decomposition or by-products: Thermal decomposition products include carbon monoxide, carbon dioxide, aliphatic aldehydes, rosin acids, terpenes, and polycyclic aromatic hydrocarbons.

Hazardous Polymerization: ( ) May occur  (x) Will Not Occur
Conditions to Avoid: N/A

6 Precautions for Safe Handling and Use

Steps to be Taken in Case of Material is Released or Spilled:
Not applicable for product in purchased form. Wood dust generated from sawing, sanding, drilling, or routing of this product may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation. Use NIOSH/MSHA approved respirator and goggles where ventilation is not possible.

Waste Disposal Method:
If disposed of or discarded in its purchased form, incineration is preferable. Dry land disposal is acceptable in most states. It is, however, the user’s responsibility to determine at the time of disposal whether your product meets RCRA criteria for hazardous waste. Follow applicable federal, state, and local regulations.

Precautions to be Taken in Handling and Storage:
No special handling precaution is required. Keep in a cool dry place away from open flames. This product may release small quantities of gaseous formaldehyde in amounts below the health hazard level (0.10 ppm) determined by OSHA. Store in well ventilated, cool, dry place away from open flame.

Other Precautions
A NIOSH/OSHA approved full-face respirator or half-face respirator with chemical goggles must be worn when the formaldehyde and/or wood dust exposure limits are exceeded. It is recommended that a full-face respirator and half-face respirator have a combination of formaldehyde and dust cartridge.

7 Health Hazard Data

Primary Health Hazard:
The primary health hazard posed by this product are thought to be due to exposure to wood dust or free gaseous formaldehyde.

Primary Rout(s) of Exposure:
( ) Ingestion:
(x) Skin: Dust
(x) Inhalation: Dust

Acute Health Hazards–Signs and Symptoms of Exposure/
Emergency and First Aid Procedures:
INGESTION: Not applicable with normal use.
EYE CONTACT: Wood dust may cause mechanical irritation. Treat dust in eye as foreign object. Flush with water to remove dust particle. Get medical help if irritation persists.
SKIN CONTACT: Wood dust may cause allergic contact dermatitis in sensitized individuals. Wood dust may also mechanically irritate the skin and cause erythema and hives.

SKIN ABSORPTION: Not known to occur with normal use.
INHALATION: Wood dust may cause unpleasant deposit/obstruction in the nasal passages, resulting in dryness of nose, dry cough, and headaches.

Medical Conditions Generally Aggravated by Exposure:
Wood dust may aggravate preexisting respiratory conditions or allergies.

Chronic Health Hazards:
The federal Dept. of Housing and Urban Development (HUD) recognizes phenolic panel products as low emitters of formaldehyde and has exempted them from Testing and Certification Requirements of the Manufactured Home Construction and Safety Standard (24 CFR Part 3280).
Wood dust(s), depending on the species (for example iroko, cocobana), may cause dermatitis on prolonged, repetitive contact, and respiratory sensitization after prolonged exposure to elevated dust levels (for example Western Red Cedar). Wood dust has been alleged to cause nasal/paranasal sinus cancer (certain European hardwoods, oak, and beech).

Carcinogenicity Listing:
(x) National Toxically Program: Formaldehyde, Wood Dust
(x) IARC Monographs: Formaldehyde, Wood Dust
(x) OSHA Regulated: Formaldehyde

8 Control Measures

Personal Protective Equipment:
RESPIRATORY PROTECTION—Not applicable for product in purchased form. A NIOSH/MSHA approved respirator is recommended when allowable exposure limits may be exceeded.
PROTECTIVE GLOVES—Not required. However, cloth, canvas or leather gloves are recommended to minimize mechanical irritation from handling product.
EYE PROTECTION—Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product.
OTHER PROTECTIVE CLOTHING OR EQUIPMENT—Not applicable for product in purchased form. Outer garments may be desirable in extremely dusty areas.
WORK/HYGIENE PRACTICES—Follow good hygienic and housekeeping practices. Clean up areas where dust settles to avoid excessive accumulation of this combustible material. Minimize blowdown or other practices that generate high airborne dust concentrations.

Ventilation:
LOCAL EXHAUST—Provide local exhaust as needed so that exposure limits are met.
MECHANICAL (GENERAL)—Provide good ventilation in processing and storage areas as needed so that exposure limits are met.
SPECIAL—Self contained breathing apparatus (SCBA) recommended when fire fighting.
OTHER—N/A
9 Transportation Data

- DOT Proper Shipping Name: Not Regulated
- Hazard Class/Division Number: 
- ID Number: 
- Packing Group: 
- Label/Placard Required: 
- DOT Hazardous Substance: 

10 User’s Responsibility

The information contained in this Material Safety Data Sheet is based on the experience of the Environmental, Safety, & Health professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user’s responsibility to determine if this information is suitable for their applications and to follow safety precautions as may be necessary. The user has the responsibility to make sure that this sheet is the most up-to-date issue.

11 Additional Information

Definition of Common Terms:

- AGCIH = American Conference of Government Industrial Hygienists
- C = Ceiling Limit
- CAS # = Chemical Abstract System Number
- IARC = International Agency for Research on Cancer
- MSHA = Mine Safety and Health Administration
- N/A = Not Applicable
- NIOSH = National Institute of Occupational Safety and Health
- NTP = National Toxicology Program
- OSHA = Occupational Safety and Health Administration
- PEL = Permissible Exposure Limit
- STEL = Short Term Exposure Limit
- LTV = Threshold Limit Value
- TWA = Time Weighted Average

Manufactured by

COLLINS PRODUCTS LLC
6410 HWY 66
Klamath Falls, OR 97601

800.417.3674 • www.CollinsWood.com