

# MATERIAL SAFETY DATA SHEET - Guardian MDO

Revised 7/1/04

## Section I Material Identification

Material Name: Medium Density Overlaid Plywood

Trade Names and Synonyms: A-Matte, B-Matte 333, MDO, Signal (MDO), Guardian MDO, 2-Step MDO

Manufacturer: Olympic Panel Products LLC.

## Section II Ingredients and Hazards

Product is made from veneered soft wood, phenol formaldehyde adhesives, resins, paper under heat and pressure. Product contains cured phenol formaldehyde adhesives and resins which may release formaldehyde in trace, but limited detectable amounts. Release formaldehyde of .039 parts per million in Large Scale Chamber Test. Hazards arise from remanufacture, sawing (wood dust) and from storage at high humidity and elevated temperatures (100 F) in unventilated spaces (formaldehyde gas).

Wood Dust: ACGIH (1987) TLV's:  
TWA 5mg/m<sup>3</sup> for soft wood, STEL 10 mg/m<sup>3</sup>

Formaldehyde Gas: HCHO Emissions Test (2004)  
Threshold: Large Chamber Value is 0.039 ppm

## Section III Physical Data

Specific Gravity: Approximately .05 (Water = 1)

Percent Volatile: Approximately 5% at 220F

Solubility in Water: Insoluble

Heat of Combustion: 8,000 to 10,000 BTU/Lb.

Appearance and Odor: Wooden Panels, Wood-like

## Section IV Fire and Explosion Hazard Data

Flash Point: None

Auto Ignition Temperature: Variable (typically >400F)

Extinguishing Media: Water Spray, Carbon Dioxide Foam or Dry Chemical as determined by Surrounding Fire

Unusual Fire and Explosion Hazards: Wood Dust. In remanufacture accumulation of wood dust during sawing may lead to explosive conditions.

## Section V Reactivity Data

Stability: Stable

Incompatibility: Avoid contact with strong oxidizers.

Conditions to Avoid: Formaldehyde. First time exposure of product to high humidity and elevated temperatures may result in release of formaldehyde gas. Wood Dust. Accumulation of wood dust in remanufacturing area may result in spontaneous heating or combustion. 212 F has been suggested as the upper temperature limit for continuous exposure of wood without risk of ignition. For wood dust

this temperature would be lower. Avoid contact with oxidizers and drying oils.

Hazardous Decomposition Products:

Burning of wood products produces irritating and toxic fumes and gases including Carbon Monoxide, Aldehydes and Organic Acids. Decomposition products of phenolic resins include formaldehyde, aromatic ring compounds and other toxic compounds.

#### Section VI: Health Hazards

TLV:

None. Panel product is essentially an inert solid.

Effects of Over Exposure:

None, unless contact made with:  
Formaldehyde: Formaldehyde is classified as a "Suspected Carcinogen." It may cause upper respiratory and eye irritation.  
Wood Dust: Allergic response, asthma or bronchitis may develop. Can cause eye irritation.

Emergency and First Aid Procedures:

Eyes: Flush with water to remove dust  
Inhalation: Remove to fresh air  
Ingestion: Not a normal route of exposure  
In all cases if irritation persists, obtain medical advice

#### Section VII Spill or Leak Procedures

Steps to be taken in case material is released or spilled:

No special precautions are required for the "as produced" product. In the remanufacturing operation sawdust should be contained. Sweep or vacuum dust for disposal, avoid creating dust conditions. Provide good ventilation when dust conditions are likely to occur.

Waste Disposal Method:

Scrap can be landfilled. Incineration in suitable incinerators only. Sawdust should be placed in a container for proper disposal in landfill or burning in a suitable incinerator as stipulated by local state and federal regulatory requirements.

#### Section VIII: Special Protection Information

Respiratory Protection:

Dust mask when sawing.

Ventilation:

Local exhaust to control sawdust in air as required by OSHA, state or local regulations.

Protective Gloves:

Recommended for handling and sawing.

Eye Protection:

Safety glasses recommended when sawing

#### Section IX: Special Precautions

Precautions to be taken in Handling and Storing:

Do not store product at high humidity in unvented space.

Other Precautions:

None

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