MATERIAL SAFETY DATA SHEET

SIMPSON TIMBER CO. 3rd and Franklin Shelton, Wa. 98582 206-426-3381 Date revised: 3/27/89

CONTACT: JERRY SOEHNLEIN

EMRGENCY NUMBER: 206-426-3381

Section I: Material Identification

Material name: High Density Overlaid Plywood

Trade names and synonyms: HDO, Guardian HDO, REGULAR

SkidGuard, Highway HDO,

MultiPour, HiMed.

Manufacturer: Simpson Timber Co.

HMIS: HEALTH...O REACTIVITY...O FLAMMABILITY...O

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Section II: Ingredients and Hazards

Product is made from veneered soft wood, phenol formaldehyde adhesives and resins, and paper under heat and pressure. Product contains cured phenol-formaldehyde adhesives and resins which may release formaldehyde in trace but detectable amounts. Release: <0.1%

Hazards arise from remanufacture, sawing: wood dust; and from storage at high humidity and elevated temperatures (100F) in unventilated spaces: formaldehyde gas.

Wood dust: ACGIH (1987) TLV's:

TWA 5mg/m³ for soft wood, STEL 10 mg/m³

Formaldehyde gas: OSHA (1988) TLV's:

Threshold: 0.5ppm; TWA 1.0ppm; STEL 2.0ppm

Section III: Physical Data

Specific gravity: Approx. 0.5, (Water=1)

Percent volatile: Approx. 5% at 220F

Solubility in water: <6%

Heat of combustion: 8000 to 10000 BTU/lb

Appearance and Odor: light brown, tan wooden panels, woodlike

Section IV: Fire and Explosion Hazard Data

Flashpoint: None
Autoignition Temperature: variable (typically >400F)
Extinguishing Media: Water Spray, Carbon Dioxide foam, sand
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 if dust contacts a source of ignition. An airborne concentration of 40g/m³ of air is commonly considered the LEL for dust of this type.

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. 212F 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 CO and CO2, polycyclic aromatic hydrocarbons, aldehydes, and organic acids. Decomposition products of phenolic resins include formaldehyde, aromatic ring compounds and other potentially 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 applicable
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 saw dust

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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. Saw dust 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: NIOSH/MSMA dust respirator under dusty conditions.

Ventilation: Local exhaust to control saw dust in air as required by OSHA, state or local regulations. Panel dust should be collected at source.

Protective Gloves: Leather, as recommended for handling and sawing.

Eye Protection: Safety glasses.

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

Housekeeping: Clean areas where wood dust settles regularly. Avoid conditions which create sparks or other conditions favoring ignitions. Minimize blowdown or other practices which generate high wood dust concentrations.

IMPORTANT: The information and data herein are believed to be accurate and have been compiled from sources believed reliable. Although reasonable care has been taken in preparation of this information, Simpson Timber Co makes no warranty of any kind, expressed or implied, concerning the accuracy or completeness of this information or data, and assumes no responsibility for its application to purchaser's intended purposes (if purchaser alters the product in such a manner as to create wood dust, then this is purchaser's responsibility). Normally recommended industrial hygiene, engineering practices and safe handling procedures should be employed at all times.