

**SAFETY DATA SHEET**  
**PLYWOOD PRODUCTS BONDED WITH PHENOL-FORMALDEHYDE**

**1.- IDENTIFICATION**

Product	Araucoply
Synonyms	Radiata Pine Plywood Softwood Plywood
Recommended use	Building Materials - Decorative, Furniture, General Construction
Company Name	<b>Paneles Arauco S.A</b>
Address	Autopista Itata Km , 21 Ranquil , Chile.
Phone	56-41-2862700
Website	www.araucoply.cl

**2.- HAZARD IDENTIFICATION**
**Signal word Danger**

**NOTE** This product is not hazardous in the form in which it is shipped by the manufacturer but may become hazardous as the result of downstream activities (e.g. cutting/sanding) which creates small particles resulting in the potential hazards as described below.

**Classification of the substance or mixture and hazard statements:**

Dust	Wood dust can irritate eyes and breathing passages. Nasal dryness, coughing, sneezing and wheezing as a result of inhalation.
Formaldehyde	These products release very low amounts of formaldehyde. Formaldehyde may be irritating to the eyes, nose through and skin. It may aggravate existing respiratory problems and cause allergies in certain susceptible persons. Formaldehyde is listed by IARC , NTP and OSHA as Probable Human Carcinogen.
Routes of entry	Irritation. Skin contact with wood may evoke allergic contact dermatitis.

**Label elements**
**DANGER**

**Precautionary Statement(s):**

Prevention Statements	P243: Take precautionary measures against static discharge. P260 and P261: Avoid breathing dust. P280: Wear protective gloves/protective clothing/eye protection. P285: In case of inadequate ventilation wear respiratory protection.
Response Statements	P302 - P352: If on skin: wash plenty of soap and water. P313: If skin irritation or rash occurs: Get medical advice/attention. P304 - P340: If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. P305 - P338: If in eyes: rinse cautiously for several minutes. Remove contact lenses if present and easy to do. P313: If eye irritation persists: Get medical advice/attention. P308 - P313: If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician. P362 and P363: Take off contaminated clothing and wash before reuse.
Disposal	P501: Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**3.- COMPOSITION/INFORMATION ON INGREDIENTS**
**AraucoPly is composed of wood and phenol-formaldehyde resin:**

Wood	CAS: none	80-99%
Polymeric Phenol-formaldehyde	CAS: 9003-35-4	20-1%
Chemical or common name	Phenol-Formaldehyde resin	
Chemical Formula	C8H6O2	

**4.-FIRST-AID MEASURES**
**Emergency and First Aid Procedure:**

1.- Inhalation	Gaseous formaldehyde may cause temporary irritation to eyes , nose and throat. Wood dust may cause respiratory sensitization and/or irritation. If inhale, remove to fresh air. Get medical advice if persistent irritation, severe coughing or breathing difficulty occurs.
2.- Skin contact	Both formaldehyde and various species of wood may cause allergic contact dermatitis in sensitized individual. In case of contact, flush skin with plenty of water for at least 15 minute. Remove contaminated clothing and footwear. Get medical attention if rash or persistent irritation or dermatitis occurs. Wash clothing before reuse.

3.-Eye Contact Gaseous formaldehyde may cause temporary irritation or a burning sensation. In case of contact immediately flush eyes with plenty of water for at least 15 minutes, holding lids apart to ensure flushing of each entire eye. Get medical attention immediately.

#### 5.- FIRE-FIGHTING MEASURES

Extinguishing Media Water, Carbon Dioxide, Sand.  
 Ignition Temperature 400°F - 500°F (204°C - 260°C) (Direct Flame)  
 Unusual Fire and Explosion Hazards Board dust is strongly explosive therefore there is hazard on the direct contact of dust with ignition sources and in closed areas. Avoid dust accumulations.  
 Hazardous Combustion Products Burning of Plywood can result in carbon monoxide, carbon dioxide, aliphatic aldehydes, including formaldehyde, resin acids, terpenes and polycyclic aromatic hydrocarbons. oxides of nitrogen, aldehydes, cyanides and other hazardous gases and particles.  
 Firefighting Procedures No special procedures.

#### 6.-ACCIDENTAL RELEASE MEASURES

Material released or spilled Vacuum, sweep or shovel to minimize dust generation. Provide adequate ventilation.  
 Waste disposal methods Recovered wood dust in container for proper disposal.

#### 7.- HANDLING AND STORAGE

Handling advice Avoid skin and eye contact. Avoid breathing dust.  
 Storage advice Store in a cool, dry and well ventilated place away from open flame & sparks.

#### 8.- EXPOSURE CONTROL MEASURES/PERSONAL PROTECTION

##### Exposure Limits:

Gaseous Formaldehyde OSHA PEL -TWA : 0,75 ppm  
 OSHA PEL -STEL: 2 ppm  
 ACGIH TLV-TWA : 0,3 ppm

##### Engineering Measures/Controls:

Local exhaust Provide local exhaust when machining products.  
 Mechanical (General) Provide general ventilation in processing and storage areas as needed so that exposure limits are met

##### Personal Protective Equipment:

Respiratory protection None usually required if dust and formaldehyde concentrations are within acceptable limits. Approved dust/formaldehyde respiratory protector and goggles are recommended when the allowable exposure limits may be exceeded.  
 Protective Gloves Not required. Cloth, canvas, or leather gloves are recommended.  
 Eye protection Goggles or safety glasses are recommended when machining products.  
 Special Special-contained breathing apparatus (SCBA) recommended when fighting fire.

#### 9.- PHYSICAL AND CHEMICAL PROPERTIES

Physical state Solid  
 Boiling Point (°F) Not Applicable  
 Vapor Pressure (MMHg) Not Applicable  
 Vapor Density (Air=1) Not Applicable  
 Specific Gravity (H2O=1) 0,53  
 Evaporation rate Not Applicable  
 Solubility in Water Insoluble in water  
 % Volatiles by Volumen Not Applicable

#### 10.-STABILITY AND REACTIVITY

Stability The product is stable  
 Incompatibility (materials to avoid) Avoid direct flame  
 Product may ignite at temperatures in excess of 204 °C.

#### 11.-TOXICOLOGICAL INFORMATION

Route(s) of entry/exposure **Inhalation, Skin, Eye (Dust)**

##### Components:

Formaldehyde **50-00-0** **Acute Toxicity:** Ingestion/Oral-Rat LD50 • 100 mg/kg; Inhalation-Rat LC50 • 203 mg/m<sup>3</sup>; Peripheral Nerve and Sensation **Spastic paralysis with or without sensory change; Behavioral:Convulsions or effect on seizure threshold; Behavioral:Excitement; Irritation:** Eye-Rabbit • 750 µg 24 Hour(s) • Severe irritation; Skin-Rabbit • 2 mg 24 Hour(s) • Severe irritation; **Multi-dose Toxicity:** Ingestion/Oral-Rat TDLo • 500 mg/kg 20 Day(s)-Intermittent; Biochemical:Enzyme inhibition, induction, or change in blood or tissue levels:**Transaminases;** Inhalation-Mouse TCLo • 400 ppb 12 Week(s)-Intermittent; Lungs, Thorax, or Respiration **Other changes;** Endocrine:**Changes in spleen weight;** Biochemical:Metabolism (intermediary) **Other proteins; Mutagen:** Micronucleus test • Inhalation-Human • 2 ppm 15 Minute(s); Micronucleus test • Inhalation-Human • 0.1 ppm 8 Hour(s); **Reproductive:** Inhalation-Rat TCLo • 12 µg/m<sup>3</sup> 24 Hour(s)(15D pre/1-22D preg); Reproductive Effects:Effects on Newborn **Growth statistics (e.g., reduced weight gain);** Reproductive Effects:Effects on Newborn **Other postnatal measures or effects**

##### Potential Health Effects:

Carcinogenic Effects Wood dust is listed by NTP known to be a Human Carcinogen (10th Report), IARC Monographs: Wood dust, Group 1 - 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 hypopharynx, oropharynx, lymphatic and hematopoietic systems, lungs, stomach, colon or rectum.

**12.-ECOLOGICAL INFORMATION**

Toxicity	This product is not expected to have ecological effects on the environment
Persistence and degradability	The product would be expected to be biodegradable
Bioaccumulation	Not expected to bioaccumulated
Mobility in soil	Not Available

**13.- DISPOSAL CONSIDERATION**

Waste information	Refer to local regulations. Normally suitable for disposal at approved land waste site
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**14.-TRANSPORT INFORMATION**

US DOT Information	This material is not a DOT hazardous material.
Canadian Transportation of Dangerous Goods (TDG):	These products are not listed as a hazardous material.

**15.-REGULATORY INFORMATION**

TSCA	Phenol-formaldehyde resin is on the TSCA chemical substance inventory.
CERCLA	Formaldehyde (100 lbs RQ) is on the CERCLA chemical substance inventory
DSL	Formaldehyde is on the Canadian Domestic Substance List.
OSHA	Wood products are not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, wood and resin dust generated by sawing, sanding or machining these products may be hazardous. Workplace exposure to formaldehyde is specifically regulates under 29 CFR 1910.1048.
SARA Hazard Classifications	Acute, Chronic
FDA	Not intended for use as a food additive or indirect food contact item.
WHMIS Classification	Wood and products made from wood are exempt from WHMIS per the Hazardous Products Act. However, wood dust is considered to be a controlled product: D2A (wood dust and formaldehyde: IARC Group 1)

**16.- OTHER INFORMATION**

Preparation date:	February 3, 2016
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**DISCLAIMER:**

This SDS is intended to be used solely for safety education and not use as specifications or warranties. The information in this SDS is provided without any representations or warranties regarding the accuracy or correctness. Since the handling and storage and use are beyond our control, Paneles Arauco S.A assume: no responsibility and disclaims liability for any loss, damage or expense arising therefrom

**KEY / LEGEND:**

ACGIH	American Conference of Governmental Industrial Hygienists
CAS	Chemical Abstract Services Number
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DOT	Department of Transportation
DSL	Domestic Substance List
FDA	Food and Drug Administration
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit.
STEL	Short Term Exposure List
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System