Jack Richeson and Co., Inc

Safety Data Sheet

May 1, 2018

1. Product Identifier

Product Form: Mixture

Product Name:Richeson Untempered Hardboard Panels

2. Intended Use of Product: Painting Panels

3. Name, Address, and telephone of Responsible Party:

Jack Richeson and Co., Inc.

557 Marcella Street

Kimberly, WI 54136

920.738.0744

www.richesonart.com

4. Emergency Phone Number

800.233.2404 M-Th 8-5 pm cst

SECTION 2: HAZARDS IDENTIFICATION

This is a wood product composed of wood and cured amino resins. Wood Dust: the hazard information denoted in this SDS apply only when the product is altered downstream by cutting, sawing, sanding, heating or other means and significant dust or fume is generated. In its shipped and finished form, this product is not considered hazardous. Formaldehyde: This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. Formaldehyde may cause cancer.

2.1. Classification of the Substance or Mixture GHS-US/CA Classification

Skin Irrit. 2	H315
Eye Irrit. 2	H319
Resp. Sens. 1	H334
Skin Sens. 1	H317
Carc. 1A	H350
STOT SE 3	H335
STOT RE 1	H372
Comb Dust	

Full text of hazard classes and H-statements: see section 16

2.2. **Label Elements**

GHS-US/CA Labeling

Hazard Pictograms (GHS-US/CA)





Signal Word (GHS-US/CA) Hazard Statements (GHS-US/CA)

: Danger

: May form combustible dust concentrations in air if converted to small particles during further processing, handling, or by other means.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H334 - May cause an allergy or asthma symptoms or breathing difficulties if inhaled.

H335 - May cause respiratory irritation.

H350 - May cause cancer (Inhalation).

H372 - Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

Precautionary Statements (GHS-US/CA): P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust or fume.

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P271 - Use only outdoors or in a well-ventilated area.

P272 - Contaminated work clothing should not be allowed out of the workplace.

P280 - Wear protective gloves, protective clothing, and eye protection.

P284 - [In case of inadequate ventilation] wear respiratory protection.

P302+P352 - IF ON SKIN: Wash with plenty of water.

P304+P340 - IF INHALED: Remove person to fresh air and keep comfortable for

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313 - If exposed or concerned: Get medical advice/attention.

P312 - Call a POISON CENTER or doctor if you feel unwell.

P314 - Get medical advice/attention if you feel unwell.

P321 - Specific treatment (see section 4 on this SDS).

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local, regional, national,

territorial, provincial, and international regulations.

Supplemental Information

: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust.

2.3. Other Hazards

Exposure may aggravate pre-existing eye, skin, or respiratory conditions.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	% *	GHS Ingredient Classification
	(CAS-No.) Not applicable	76 - 93	Skin Irrit. 2, H315
Ligno-cellulosic materials			Eye Irrit. 2A, H319
			Resp. Sens. 1, H334
			Skin Sens. 1, H317
			Carc. 1A, H350
			STOT SE 3, H335
			STOT RE 1, H372
			Comb. Dust
Urea, polymer with formaldehyde and	(CAS-No.) 25036-13-9	<= 18	Flam. Liq. 3, H226
1,3,5-triazine-2,4,6-triamine			Eye Irrit. 2, H319
Urea, polymer with formaldehyde	(CAS-No.) 9011-05-6	<= 17.2	Not classified
Water	(CAS-No.) 7732-18-5	2.4 - 6.3	Not classified
Ammonium polyphosphate	(CAS-No.) 68333-79-9	1.8 - 5.4	Acute Tox. 4 (Oral), H302
	,		Eye Irrit. 2A, H319
Urea	(CAS-No.) 57-13-6	0.09 - 4	Comb. Dust
Formaldehyde-melamine polymer*	(CAS-No.) 9003-08-1	<= 2.8	Not classified
Slack wax, petroleum	(CAS-No.) 64742-61-6	0.25 - 2	Not classified
Titanium dioxide*	(CAS-No.) 13463-67-7	<= 1.55	Carc. 2, H351
Carbon black*	(CAS-No.) 1333-86-4	<= 1	Carc. 2, H351
	, , , , , , , , , , , , , , , , , , , ,		Comb. Dust
Ammonium chloride	(CAS-No.) 12125-02-9	<= 0.4	Acute Tox. 4 (Oral), H302
	,		Eye Irrit. 2A, H319
			Aquatic Acute 3, H402
			Comb. Dust
Ammonium sulfate	(CAS-No.) 7783-20-2	<= 0.3	Aquatic Acute 3, H402
Formaldehyde	(CAS-No.) 50-00-0	< 0.1	Flam. Lig. 4, H227
, , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Acute Tox. 3 (Oral), H301
			Acute Tox. 3 (Dermal), H311
			Acute Tox. 3 (Inhalation:gas), H331
			Skin Corr. 1B, H314
			Eye Dam. 1, H318
			Skin Sens. 1, H317
			Muta. 2, H341
			Carc. 1A, H350
			STOT SE 3, H335
			Aquatic Acute 2, H401
Diethylene glycol*	(CAS-No.) 111-46-6	<= 0.05	Acute Tox. 4 (Oral), H302
,	,		STOT RE 2, H373

Full text of H-phrases: see section 16

Percentages are listed in weight by weight percentage (w/w%) for liquid and solid ingredients. Gas ingredients are listed in volume by volume percentage (v/v%). Ingredients noted with * are ingredients used in either TFL or painted/printed decorative surfacing. This is a wood product composed of wood and cured amino resins. The hazard information denoted in this SDS apply only when the product is altered downstream by cutting, sawing, sanding, heating or other means and significant dust or fume is generated. In its shipped and finished form, this product is not considered hazardous. This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. Formaldehyde may cause cancer.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: Using proper respiratory protection, move the exposed person to fresh air at once. Encourage exposed person to cough, spit out, and blow nose to remove dust. Immediately call a poison center, physician, or emergency medical service.

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Rinse mouth. Do NOT induce vomiting. Obtain medical attention.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation. Causes skin irritation. May cause respiratory irritation. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin sensitization. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation). May cause cancer (Inhalation).

Inhalation: Irritation of the respiratory tract and the other mucous membranes. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction. Dust may be harmful or cause irritation.

Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer by inhalation. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but will burn at high temperatures. Dust generated from processing may present a dust explosion hazard.

Explosion Hazard: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Dust explosion hazard in air.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Firefighting Instructions: Use water spray or fog for cooling exposed containers. Do not breathe fumes from fires or vapors from decomposition.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen oxides. Sodium oxides. Potassium oxides. Titanium oxides. Sulfur oxides. ammonium chloride. Amines. Aldehydes. Hydrogen cyanide. Ammonia. Phosphorous oxide. Formaldehyde. Formaldeyhde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause

respiratory and eye irritation.

Other Information: Fine dust dispersed in air may ignite.

Reference to Other Sections

Refer to Section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Avoid generating dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Remove ignition sources. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protective equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area. Upon arrival at the scene, a first responder is expected to recognize the presence of dangerous goods, protect oneself and the public, secure the area, and call for the assistance of trained personnel as soon as conditions permit.

6.2. Environmental Precautions

Prevent entry to sewers and public waters.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain solid spills with appropriate barriers and prevent migration and entry into sewers or streams. Avoid generation of dust during clean-up of spills.

Methods for Cleaning Up: Clean up spills immediately and dispose of waste safely. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. For particulates and dust: Vacuum clean-up is preferred. If sweeping is required use a dust suppressant. Use explosion proof vacuum during cleanup, with appropriate filter. Do not mix with other materials. Use only non-sparking tools. Contact competent authorities after a spill.

6.4. Reference to Other Sections

See Section 8 for exposure controls and personal protection and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Handle in accordance with good industrial hygiene and safety procedures. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. For particulates and dust: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid contact with eyes, skin and clothing. Do not breathe dust. Avoid creating or spreading dust. Keep away from heat, sparks, open flames, hot surfaces. – No smoking.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Comply with applicable regulations. Avoid creating or spreading dust. For particulates and dust: Use explosion-proof electrical, ventilating, lighting equipment. Proper grounding procedures to avoid static electricity should be followed.

Storage Conditions: Keep container closed when not in use. Store in a dry, cool and well-ventilated place. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Store locked up/in a secure area. **Incompatible Materials:** Strong acids, strong bases, strong oxidizers.

7.3. Specific End Use(s)

Building Materials - Decorative, Furniture, General Construction

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government.

Wood dust, all soft and hard	d woods		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	1 mg/m³	
Alberta	OEL TWA (mg/m³)	5 mg/m³ (total)	
Québec	VEMP (mg/m³)	5 mg/m³ (except red cedar, containing no Asbestos and <1% Crystalline silica-total dust)	
Yukon	OEL STEL (mg/m³)	10 mg/m³ (non-allergenic) 5 mg/m³ (allergenic, including cedar, mahogany, teak)	
Yukon	OEL TWA (mg/m³)	5 mg/m³ (non-allergenic) 2.5 mg/m³ (allergenic, including cedar, mahogany, teak)	
Urea (57-13-6)			
USA AIHA	WEEL TWA (mg/m³)	10 mg/m ³	
Formaldehyde (50-00-0)			
Mexico	OEL Ceiling (mg/m³)	3 mg/m ³	
Mexico	OEL Ceiling (ppm)	2 ppm	
USA ACGIH	ACGIH TWA (ppm)	0.1 ppm	
USA ACGIH	ACGIH STEL (ppm)	0.3 ppm	
USA ACGIH	ACGIH chemical category	dermal sensitizer,Confirmed Human Carcinogen	
USA OSHA	OSHA PEL (TWA) (ppm)	0.75 ppm	
USA OSHA	OSHA PEL (STEL) (ppm)	2 ppm (see 29 CFR 1910.1048)	
USA NIOSH	NIOSH REL (TWA) (ppm)	0.016 ppm	
USA NIOSH	NIOSH REL (ceiling) (ppm)	0.1 ppm	
USA IDLH	US IDLH (ppm)	20 ppm	
Alberta	OEL Ceiling (mg/m³)	1.3 mg/m³	
Alberta	OEL Ceiling (ppm)	1 ppm	
Alberta	OEL TWA (mg/m³)	0.9 mg/m³	
Alberta	OEL TWA (ppm)	0.75 ppm	
British Columbia	OEL Ceiling (ppm)	1 ppm	
British Columbia	OEL TWA (ppm)	0.3 ppm	
Manitoba	OEL STEL (ppm)	0.3 ppm	
Manitoba	OEL TWA (ppm)	0.1 ppm	
New Brunswick	OEL STEL (ppm)	1.5 ppm	
New Brunswick	OEL TWA (ppm)	0.5 ppm	
Newfoundland & Labrador	OEL STEL (ppm)	0.3 ppm	
Newfoundland & Labrador	OEL TWA (ppm)	0.1 ppm	
Nova Scotia	OEL STEL (ppm)	0.3 ppm	
Nova Scotia	OEL TWA (ppm)	0.1 ppm	

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Nunavut	OEL Ceiling (ppm)	0.3 ppm	
Northwest Territories	OEL Ceiling (ppm)	0.3 ppm	
Ontario	OEL Ceiling (ppm)	1.5 ppm	
Ontario	OEL STEL (ppm)	1.5 ppm	
Prince Edward Island	OEL STEL (ppm)	0.3 ppm	
Prince Edward Island	OEL TWA (ppm)	0.1 ppm	
Québec	PLAFOND (mg/m³)	3 mg/m ³	
	1 0	-	
Québec	PLAFOND (ppm)	2 ppm	
Saskatchewan	OEL Ceiling (ppm)	0.3 ppm	
Yukon	OEL Ceiling (mg/m³)	3 mg/m³	
Yukon	OEL Ceiling (ppm)	2 ppm	
Titanium dioxide (13463-67-	*		
Mexico	OEL TWA (mg/m³)	10 mg/m³	
Mexico	OEL STEL (mg/m³)	20 mg/m³	
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m ³	
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen	
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ (total dust)	
USA IDLH	US IDLH (mg/m³)	5000 mg/m ³	
Alberta	OEL TWA (mg/m³)	10 mg/m³	
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (total dust)	
		3 mg/m³ (respirable fraction)	
Manitoba	OEL TWA (mg/m³)	10 mg/m ³	
New Brunswick	OEL TWA (mg/m³)	10 mg/m³	
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³	
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³	
Nunavut	OEL STEL (mg/m³)	20 mg/m³	
Nunavut	OEL TWA (mg/m³)	10 mg/m ³	
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³	
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³	
Ontario	OEL TWA (mg/m³)	10 mg/m ³	
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³	
Québec	VEMP (mg/m³)	10 mg/m³ (containing no Asbestos and <1% Crystalline silica-total dust)	
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³	
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³	
Yukon	OEL STEL (mg/m³)	20 mg/m³	
Yukon	OEL TWA (mg/m³)	30 mppcf	
		10 mg/m ³	
Carbon black (1333-86-4)			
Mexico	OEL TWA (mg/m³)	3.5 mg/m ³	
Mexico	OEL STEL (mg/m³)	7 mg/m³	
USA ACGIH	ACGIH TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)	
USA ACGIH	ACGIH chemical category	Confirmed Animal Carcinogen with Unknown Relevance to	
		Humans	
USA OSHA	OSHA PEL (TWA) (mg/m³)	3.5 mg/m ³	

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

		ording To The Hazardous Products Regulation (February 11, 2015).	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	3.5 mg/m ³	
		0.1 mg/m³ (Carbon black in presence of Polycyclic aromat	
		hydrocarbons)	
USA IDLH	US IDLH (mg/m³)	1750 mg/m³	
Alberta	OEL TWA (mg/m³)	3.5 mg/m ³	
British Columbia	OEL TWA (mg/m³)	3 mg/m³ (inhalable)	
Manitoba	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)	
New Brunswick	OEL TWA (mg/m³)	3.5 mg/m ³	
Newfoundland & Labrador	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)	
Nova Scotia	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)	
Nunavut	OEL STEL (mg/m³)	7 mg/m ³	
Nunavut	OEL TWA (mg/m³)	3.5 mg/m ³	
Northwest Territories	OEL STEL (mg/m³)	7 mg/m ³	
Northwest Territories	OEL TWA (mg/m³)	3.5 mg/m ³	
Ontario	OEL TWA (mg/m³)	3 mg/m³ (inhalable)	
Prince Edward Island	OEL TWA (mg/m³)	3 mg/m³ (inhalable particulate matter)	
Québec	VEMP (mg/m³)	3.5 mg/m ³	
Saskatchewan	OEL STEL (mg/m³)	7 mg/m ³	
Saskatchewan	OEL TWA (mg/m³)	3.5 mg/m ³	
Yukon	OEL STEL (mg/m³)	7 mg/m ³	
Yukon	OEL TWA (mg/m³)	3.5 mg/m ³	
Diethylene glycol (111-46-6)			
USA AIHA	WEEL TWA (mg/m³)	10 mg/m ³	
Ammonium chloride (12125-	02-9)		
Mexico	OEL TWA (mg/m³)	10 mg/m³ (fume)	
Mexico	OEL STEL (mg/m³)	20 mg/m³ (fume)	
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ (fume)	
USA ACGIH	ACGIH STEL (mg/m³)	20 mg/m³ (fume)	
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³ (fume)	
USA NIOSH	NIOSH REL (STEL) (mg/m³)	20 mg/m³ (fume)	
Alberta	OEL STEL (mg/m³)	20 mg/m³ (fume)	
Alberta	OEL TWA (mg/m³)	10 mg/m³ (fume)	
British Columbia	OEL STEL (mg/m³)	20 mg/m³ (fume)	
British Columbia	OEL TWA (mg/m³)	10 mg/m³ (fume)	
Manitoba	OEL STEL (mg/m³)	20 mg/m³ (fume)	
Manitoba	OEL TWA (mg/m³)	10 mg/m³ (fume)	
New Brunswick	OEL STEL (mg/m³)	20 mg/m³ (fume)	
New Brunswick	OEL TWA (mg/m³)	10 mg/m³ (fume)	
Newfoundland & Labrador	OEL STEL (mg/m³)	20 mg/m³ (fume)	
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³ (fume)	
Nova Scotia	OEL STEL (mg/m³)	20 mg/m³ (fume)	
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³ (fume)	
Nunavut	OEL STEL (mg/m³)	20 mg/m³ (fume)	
Nunavut	OEL TWA (mg/m³)	10 mg/m³ (fume)	
Northwest Territories	OEL STEL (mg/m³)	20 mg/m³ (fume)	
Northwest Territories	OEL TWA (mg/m³)	10 mg/m³ (fume)	
		- We framework	

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Ontario	OEL TWA (mg/m³)	10 mg/m³ (fume)
Prince Edward Island	OEL STEL (mg/m³)	20 mg/m³ (fume)
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³ (fume)
Québec	VECD (mg/m³)	20 mg/m³ (fume)
Québec	VEMP (mg/m³)	10 mg/m³ (fume)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³ (fume)
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³ (fume)
Yukon	OEL STEL (mg/m³)	20 mg/m³ (fume)
Yukon	OEL TWA (mg/m³)	10 mg/m³ (fume)

8.2. Exposure Controls

Appropriate Engineering Controls: The following applies to the product if it is cut, sanded or altered in such a way that excessive and/or significant particulates and/or dusts may be generated: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits. Power equipment should be equipped with proper dust collection devices. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Protective goggles. Insufficient ventilation: wear respiratory protection.









Materials for Protective Clothing: Chemically resistant materials and fabrics.

Hand Protection: Wear protective gloves.

Eye and Face Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn. In case of inadequate ventilation, oxygen deficient atmosphere, or where exposure levels are not known wear approved respiratory protection.

Other Information: When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : MDF panel; Straw yellow (light brown)

Odor : No distinctive odor
Odor Threshold : Not available
pH : Not available

Evaporation Rate : Not available
Melting Point : Not available
Freezing Point : Not available
Boiling Point : Not available
Flash Point : Not available

Auto-ignition Temperature : 425 - 475 °F (218.33 - 246.11 °C)

Decomposition Temperature : Not available Flammability (solid, gas) : Not available

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

Lower Flammable Limit Not available Upper Flammable Limit Not available Not available Vapor Pressure Relative Vapor Density at 20°C Not available **Relative Density** Not available Specific Gravity Not available Insoluble in water. Solubility Partition Coefficient: N-Octanol/Water Not available Viscosity Not available 0 %

VOC content

SECTION 10: STABILITY AND REACTIVITY

- 10.1. Reactivity: Hazardous reactions will not occur under normal conditions.
- 10.2. Chemical Stability: Stable under recommended handling and storage conditions (see section 7).
- 10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.
- 10.4. Conditions to Avoid: Direct sunlight, extremely high or low temperatures, and incompatible materials. Sparks, heat, open flame and other sources of ignition. Dust accumulation (to minimize explosion hazard).
- 10.5. Incompatible Materials: Strong acids, strong bases, strong oxidizers.
- 10.6. Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced. Thermal decomposition generates: Irritating fumes. Formaldehyde. Formaldehyde is a potential carcinogen and can act as a potential skin and respiratory sensitizer. Formaldehyde can also cause respiratory and eye irritation.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects - Product

Acute Toxicity (Oral): Not classified Acute Toxicity (Dermal): Not classified Acute Toxicity (Inhalation): Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Causes skin irritation. Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: May cause an allergy or asthma symptons or breathing difficulties if inhaled. May cause an allergic

skin reaction.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: May cause cancer (Inhalation).

Specific Target Organ Toxicity (Repeated Exposure): Causes damage to organs (lungs) through prolonged or repeated exposure

(Inhalation).

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): May cause respiratory irritation.

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Irritation of the respiratory tract and the other mucous membranes. Exposure may produce cough, mucous secretions, shortness of breath, chest tightness or other symptoms indicative of an allergic/sensitization reaction. Dust may be harmful or cause irritation.

Symptoms/Injuries After Skin Contact: Redness, pain, swelling, itching, burning, dryness, and dermatitis. May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: Contact causes severe irritation with redness and swelling of the conjunctiva.

Symptoms/Injuries After Ingestion: Ingestion may cause adverse effects.

Chronic Symptoms: May cause cancer by inhalation. Causes damage to organs (lungs) through prolonged or repeated exposure (Inhalation).

11.2. Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data:

Urea, polymer with formaldehyde (9011-05-6)			
LD50 Oral Rat	8394 mg/kg		
LD50 Dermal Rat	> 2100 mg/kg		
LC50 Inhalation Rat	> 167 mg/m³ (Exposure time: 4 h)		
Urea (57-13-6)			
LD50 Oral Rat	8471 mg/kg		
Ammonium sulfate (7783-20-2)			
LD50 Oral Rat	> 2000 mg/kg		
Formaldehyde (50-00-0)			
LD50 Oral Rat	100 mg/kg		
LD50 Dermal Rat	270 mg/kg		
ATE US/CA (gas)	700.00 ppmV/4h		
Titanium dioxide (13463-67-7)	1		
LD50 Oral Rat	> 10000 mg/kg		
Carbon black (1333-86-4)			
LD50 Oral Rat	> 8000 mg/kg		
Formaldehyde-melamine polymer (9003-08-1)			
LD50 Oral Rat	> 10 g/kg		
LD50 Dermal Rabbit	> 10 g/kg		
Diethylene glycol (111-46-6)			
LD50 Oral Rat	1120 mg/kg		
LD50 Dermal Rabbit	11890 mg/kg		
Ammonium chloride (12125-02-9)			
LD50 Oral Rat	1650 mg/kg		
Ammonium polyphosphate (68333-79-9)			
LD50 Oral Rat	300 - 2000 mg/kg		
Wood dust, all soft and hard woods			
IARC Group	1		
National Toxicology Program (NTP) Status	Known Human Carcinogens.		
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.		
Formaldehyde (50-00-0)			
IARC Group	1		
National Toxicology Program (NTP) Status	Known Human Carcinogens.		
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.		
OSHA Specifically Regulated Carcinogen List	In OSHA Specifically Regulated Carcinogen list.		
Titanium dioxide (13463-67-7)			
IARC Group	2B		
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.		
Carbon black (1333-86-4)			
IARC Group	2B		
OSHA Hazard Communication Carcinogen List	In OSHA Hazard Communication Carcinogen list.		

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Ecology - General: Not classified.

•			
Urea (57-13-6)			
LC50 Fish 1	16200 - 18300 mg/l (Exposure time: 96 h - Species: Poecilia reticulata)		
EC50 Daphnia 1	3910 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
Ammonium sulfate (7783-20-2)			
LC50 Fish 1	53 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)		
EC50 Daphnia 1	121.7 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
Formaldehyde (50-00-0)			
LC50 Fish 1	22.6 - 25.7 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])		
EC50 Daphnia 1	2 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
LC50 Fish 2	1510 μg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])		
EC50 Daphnia 2	11.3 - 18 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])		
Carbon black (1333-86-4)			
EC50 Daphnia 1	5600 mg/l (Exposure time: 24 h - Species: Daphnia magna)		
Diethylene glycol (111-46-6)			
LC50 Fish 1	75200 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])		
EC50 Daphnia 1	84000 mg/l (Exposure time: 48 h - Species: Daphnia magna)		
Ammonium chloride (12125-02-9)			
LC50 Fish 1	209 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [static])		
EC50 Daphnia 1	161 mg/l		
LC50 Fish 2	42.91 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss)		
NOEC Chronic Fish	8 mg/l		
NOEC Chronic Crustacea	14.6 mg/l		
Ammonium polyphosphate (68333-79-	9)		
LC50 Fish 1	> 500 mg/l (Exposure time: 96 h - Species: Brachydanio rerio [static])		
LC50 Fish 2	123 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [flow-through])		
			

12.2. Persistence and Degradability

MDF, Vesta ULEF MDF, Decoratively Surfaced		
Persistence and Degradability	Not established.	

12.3. Bioaccumulative Potential

MDF, Vesta ULEF MDF, Decoratively Surfaced			
Bioaccumulative Potential	Not established.		
Urea (57-13-6)			
BCF Fish 1	< 10		
Log Pow	-1.59 (at 25 °C)		
Ammonium sulfate (7783-20-2)	Ammonium sulfate (7783-20-2)		
Log Pow	-5.1 (at 25 °C)		
Formaldehyde (50-00-0)			
Log Pow 0.35 (at 25 °C)			
Diethylene glycol (111-46-6)			
BCF Fish 1	100 - 180		
Log Pow -1.98 (at 25 °C)			

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

12.4. Mobility in Soil Not available

12.5. Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of contents/container in accordance with local, regional, national, territorial, provincial, and international regulations.

Additional Information: Container may remain hazardous when empty. Continue to observe all precautions.

Ecology - Waste Materials: Avoid release to the environment.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT
 14.2. In Accordance with IMDG
 14.3. In Accordance with IATA
 14.4. In Accordance with TDG
 Not regulated for transport
 Not regulated for transport
 Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

MDF, Vesta ULEF MDF, Decoratively Surfaced		
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard	
	Delayed (chronic) health hazard	
	Fire hazard	
	Sudden release of pressure hazard	
Urea, polymer with formaldehyde (9011-05-6)		
Listed on the United States TSCA (Toxic Substances Control Ac	ct) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the	
	Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA	
	Inventory Data Base Production and Site Reports (40 CFR 710(C)).	
Urea, polymer with formaldehyde and 1,3,5-triazine-2,4,6-tr	iamine (25036-13-9)	
Listed on the United States TSCA (Toxic Substances Control Ac	ct) inventory	
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the	
	Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA	
	Inventory Data Base Production and Site Reports (40 CFR 710(C)).	
Slack wax, petroleum (64742-61-6)		
Listed on the United States TSCA (Toxic Substances Control Ac	t) inventory	
Urea (57-13-6)		
Listed on the United States TSCA (Toxic Substances Control Ac	ct) inventory	
Ammonium sulfate (7783-20-2)		
Listed on the United States TSCA (Toxic Substances Control Ac	ct) inventory	
Formaldehyde (50-00-0)		
Listed on the United States TSCA (Toxic Substances Control Ac	ct) inventory	
Listed on the United States SARA Section 302		
Subject to reporting requirements of United States SARA Sect	ion 313	
CERCLA RQ	100 lb	
SARA Section 302 Threshold Planning Quantity (TPQ) 500 lb		

P - F -		-		m 1	
Safe	otv.	Dat	ra '	١n	eet
July	- cy	-a		,,,,,	cci

According To Federal Register / Vol. 77. No. 58 / Monday. March 26. 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).		
SARA Section 313 - Emission Reporting	0.1 %	
Titanium dioxide (13463-67-7)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Carbon black (1333-86-4)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Formaldehyde-melamine polymer (9003-08-1)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
EPA TSCA Regulatory Flag	XU - XU - indicates a substance exempt from reporting under the	
	Inventory Update Reporting Rule, i.e, Partial Updating of the TSCA	
	Inventory Data Base Production and Site Reports (40 CFR 710(C)).	
Diethylene glycol (111-46-6)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Ammonium chloride (12125-02-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
CERCLA RQ	5000 lb	
Water (7732-18-5)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		
Ammonium polyphosphate (68333-79-9)		
Listed on the United States TSCA (Toxic Substances Control Act) inventory		

15.3. Canadian Regulations				
Urea, polymer with formaldehyde (9011-05-6)				
Listed on the Canadian DSL (Domestic Substances List)				
Urea, polymer with formaldehyde and 1,3,5-triazine-2,4,6-triamine (25036-13-9)				
Listed on the Canadian DSL (Domestic Substances List)				
Slack wax, petroleum (64742-61-6)				
Listed on the Canadian DSL (Domestic Substances List)				
Urea (57-13-6)				
Listed on the Canadian DSL (Domestic Substances List)				
Ammonium sulfate (7783-20-2)				
Listed on the Canadian DSL (Domestic Substances List)				
Formaldehyde (50-00-0)				
Listed on the Canadian DSL (Domestic Substances List)				
Titanium dioxide (13463-67-7)				
Listed on the Canadian DSL (Domestic Substances List)				
Carbon black (1333-86-4)				
Listed on the Canadian DSL (Domestic Substances List)				
Formaldehyde-melamine polymer (9003-08-1)				
Listed on the Canadian DSL (Domestic Substances List)				
Diethylene glycol (111-46-6)				
Listed on the Canadian DSL (Domestic Substances List)				
Ammonium chloride (12125-02-9)				
Listed on the Canadian DSL (Domestic Substances List)				
Water (7732-18-5)				
Listed on the Canadian DSL (Domestic Substances List)				
Ammonium polyphosphate (68333-79-9)				
Listed on the Canadian DSL (Domestic Substances List)				

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Date of Preparation or Latest

: 05/18/18

Revision

Other Information

: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200 and Canada's Hazardous Products

Regulations (HPR) SOR/2015-17.

GHS Full Text Phrases:

Acute Tox. 3 (Dermal)	Acute toxicity (dermal) Category 3
Acute Tox. 3 (Inhalation:gas)	Acute toxicity (inhalation:gas) Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral) Category 3
Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
Aquatic Acute 2	Hazardous to the aquatic environment - Acute Hazard Category 2
Aquatic Acute 3	Hazardous to the aquatic environment - Acute Hazard Category 3
Carc. 1A	Carcinogenicity Category 1A
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Flam. Liq. 3	Flammable liquids Category 3
Flam. Liq. 4	Flammable liquids Category 4
Muta. 2	Germ cell mutagenicity Category 2
Resp. Sens. 1	Respiratory sensitization, Category 1
Skin Corr. 1B	Skin corrosion/irritation Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1	Skin sensitization, Category 1
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT RE 2	Specific target organ toxicity (repeated exposure) Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H226	Flammable liquid and vapor
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H311	Toxic in contact with skin
H314	Causes severe skin burns and eye damage
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation
H331	Toxic if inhaled
H334	May cause an allergy or asthma symptoms or breathing difficulties if inhaled
H335	May cause respiratory irritation
H341	Suspected of causing genetic defects
	May cause cancer

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations And According To The Hazardous Products Regulation (February 11, 2015).

ccording to rederal Register / Vol. 77, No. 36 / Monday, March 20, 2012 / Rules And Regulations And According to The Hazardous Products Regulation (reducing 11, 2015).			
	H351		Suspected of causing cancer
	H372		Causes damage to organs through prolonged or repeated exposure
	H373		May cause damage to organs through prolonged or repeated exposure
	H401		Toxic to aquatic life
	H402		Harmful to aquatic life
			2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
NFPA	Fire Hazard		2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can

NFPA Reactivity Hazard

: 0 - Material that in themselves are normally stable, even

under fire conditions.

HMIS III Rating

Health : 2 Moderate Hazard - Temporary or minor injury may occur

* Chronic - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 3 Serious Hazard
Physical : 0 Minimal Hazard

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. The information contained in this Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure that this sheet is the most up-to-date issue. Arauco North America is a trade name used by Flakeboard Company Limited, Flakeboard America Limited, Arauco Panels USA LLC, and other North America affiliates, each of which is an independent company and is not liable or responsible for acts or obligations of its affiliates.

GHS Label



Particleboard/MDF/Decoratively Surfaced Panels

ARAUCO North America, 400 Perimeter Center Terrace Suite 750 Atlanta, GA 30346 General Information: 800-261-4890

Danger

This is a wood product composed of wood and cured amino resins. Wood Dust: hazard information applies when the product is altered downstream by cutting, sawing, sanding, heating or other means and significant dust or fume is generated. In its shipped and finished form, this product is not considered hazardous. May form combustible dust concentrations in air if converted to small particles during further processing, handling, or by other means.

Formaldehyde: This product contains less than 0.1% free formaldehyde. Residual formaldehyde gas may be released from this product. The amount and level will depend on local conditions of use. Formaldehyde gas is irritating to the eyes and upper respiratory tract and may aggravate existing respiratory conditions or allergies. Formaldehyde may cause cancer.

Precautions:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Refer to product SDS, available from your employer. Do not breathe dust or fume. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Proper grounding procedures to avoid static electricity should be followed. Prevent dust accumulation (to minimize explosion hazard). Avoid generating dust. Use proper dust collection systems and/or the use of a dust mask or other suitable personal protection equipment.

Prop 65 Warning

California Proposition 65 Notification Requirement

WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Decoratively surfaced wood products (for example, decorative papers, or surfaced with paint or print) may also generate other inhalable trace particles which are known to the State of California to cause cancer (for example, airborne inhalable trace particles of titanium dioxide, and/or carbon black). Avoid inhaling wood dust and trace particles by using proper dust collection systems and/or the use of a dust mask or other suitable personal protection equipment. This product can expose you to formaldehyde, a substance known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov/wood.