

SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

Product identifier used on the label

: **Tolko Industries Ltd. OSB Products**

Product Code(s) : None reported.

Recommended use of the chemical and restrictions on use

: Construction

Chemical family

: Wood products

Name, address, and telephone number of the supplier:

Tolko

3000 28 St.
Vernon, BC, Canada
V1T 9W9

Supplier's Telephone # : 250-545-4411

24 Hr. Emergency Tel # : (250) 546-3171 (British Columbia); (250) 578-7212 (British Columbia)

Name, address, and telephone number of the manufacturer:

Refer to supplier

SECTION 2. HAZARDS IDENTIFICATION

Classification of the chemical

Solid article.

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 (sanding/cutting) which creates small particles resulting in the potential hazards listed below.

This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015).

Hazard classification :

Combustible Dust

Serious eye damage/eye irritation - Category 2B

Skin Corrosion/Irritation - Category 2

Skin sensitization - Category 1A

Respiratory sensitization - Category 1

Carcinogenicity - Category 1

Specific target organ toxicity, repeated exposure - Category 2

Label elements

Hazard pictogram(s)



Signal Word

DANGER!

Hazard statement(s)

May form combustible dust concentrations in air

Causes eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause cancer.

May cause damage to organs through prolonged or repeated exposure if inhaled.

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Precautionary statement(s)

Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.
Wear protective gloves/clothing and eye/face protection.
In case of inadequate ventilation wear respiratory protection.

IF exposed or concerned: Get medical advice/attention.
If on skin: Wash with plenty of water.
If skin irritation or rash occurs: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.
IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms call a poison center or doctor.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Store locked up.
Dispose of contents/container in accordance with local regulation.

Other hazards

Other hazards which do not result in classification :Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Solid article. 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 (sanding/cutting) which creates small particles resulting in the potential hazards listed below.

<u>Chemical name</u>	<u>Common name and synonyms</u>	<u>CAS #</u>	<u>Concentration (% by weight)</u>
Wood / Wood Dust	Not available.	Proprietary	87.0 - 95.0
Polymeric MDI	Polyphenylene polymethylene polyisocyanate PMDI	9016-87-9	0.0 - 10.0
Formaldehyde	Methanal Methyl Aldehyde Methylene oxide	50-00-0	<0.1

The % concentrations for the above listed chemicals will vary from batch to batch. Concentrations listed represent the actual concentration range for each chemical.

SECTION 4. FIRST-AID MEASURES

Description of first aid measures

- Ingestion* : Do NOT induce vomiting. Never give anything by mouth if victim is unconscious. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs. Seek medical advice.
- Inhalation* : If breathed in, move person into fresh air. If breathing is irregular or stopped, administer artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Seek immediate medical attention/advice.
- Skin contact* : Remove/Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. Immediately call a POISON CENTRE or doctor/physician. Wash contaminated clothing before reuse.
- Eye contact* : Immediately flush eyes with plenty of water for at least 15 minutes. Call a physician or poison control center immediately.

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Most important symptoms and effects, both acute and delayed

- : Causes eye irritation. Symptoms may include tearing, redness and discomfort. Causes skin irritation. Symptoms may include mild redness and swelling. May cause an allergic skin reaction. Symptoms may include redness, itching and swelling. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Symptoms may include coughing, mucous production and difficulty breathing. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure if inhaled.

Indication of any immediate medical attention and special treatment needed

- : Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

- : Carbon dioxide, dry chemical, and water or fog spray.

Unsuitable extinguishing media

- : Do not use a solid water stream as it may scatter and spread the fire.

Special hazards arising from the substance or mixture / Conditions of flammability

- : Dust may form explosive mixture in air. Burning produces obnoxious and toxic fumes.

Flammability classification (OSHA 29 CFR 1910.106)

- : Combustible Dust

Hazardous combustion products

- : Irritating or noxious fumes, acrid smoke, and carbon oxides.

Special protective equipment and precautions for firefighters

Protective equipment for fire-fighters

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Special fire-fighting procedures

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

- : Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with the clean-up should wear the appropriate chemically protective equipment. Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.

Methods and material for containment and cleaning up

- : Extinguish all flames in the vicinity. Ventilate the area. Sweep up or vacuum up spillage and collect in suitable container for disposal.

Special spill response procedures

- : Dispose of in accordance with federal, provincial and local hazardous waste laws. US CERCLA Reportable quantity (RQ): formaldehyde (100 lbs / 45.4 kg)

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling

- : Use only in well-ventilated areas. Wear protective gloves/clothing. Avoid breathing of dust created by cutting, sanding, or grinding. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.

Conditions for safe storage : Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect against physical damage. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

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Incompatible materials : Strong oxidizing agents;
 Strong acids;
 Strong bases.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<u>Exposure Limits:</u>				
<u>Chemical Name</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Wood / Wood Dust	N/Av	N/Av	N/Av	N/Av
Polymeric MDI	0.005 ppm (as MDI)	N/Av	0.02 ppm (0.2 mg/m ³) (Ceiling) (as MDI)	N/Av
Formaldehyde	0.3 ppm (Ceiling)	N/Av	0.75 ppm	2 ppm

Exposure controls

Ventilation and engineering measures

: Use only in well-ventilated areas. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment. Use explosion-proof electrical and ventilating equipment.

Respiratory protection

: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators. Confirmation of which type of respirator is most suitable for the intended application should be obtained from respiratory protection suppliers.

Skin protection

: Wear protective gloves. Advice should be sought from glove suppliers.

Eye / face protection

: Chemical goggles must be worn to prevent dusts from entering the eyes.

Other protective equipment

: Ensure that eyewash stations and safety showers are close to the workstation location.

General hygiene considerations

: Do not breathe dust. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Routinely wash work clothing and protective equipment to remove contaminants.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Wood panelling
Odour : Mild aromatic odour.
Odour threshold : N/Av
pH : N/Av
Melting/Freezing point : N/Av
Initial boiling point and boiling range : N/Av
Flash point : N/Av
Flashpoint (Method) : N/Av
Evaporation rate (BuAe = 1) : N/Av
Flammability (solid, gas) : Not applicable.
Lower flammable limit (% by vol.) : 40 g/m³ (dust)
Upper flammable limit (% by vol.) : N/Av
Oxidizing properties : None known.
Explosive properties : Dust can form an explosive mixture in air.
Vapour pressure : N/Av

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Vapour density : N/Av
Relative density / Specific gravity : 0.40-0.80
Solubility in water : Insoluble.
Other solubility(ies) : N/Av
Partition coefficient: n-octanol/water or Coefficient of water/oil distribution : N/Av
Auto-ignition temperature : 204°C (399.2°F)
Decomposition temperature : Not available.
Viscosity : N/Av
Volatiles (% by weight) : None.
Volatile organic Compounds (VOC's) : N/Av
Absolute pressure of container : N/Av
Flame projection length : N/Av
Other physical/chemical comments : None known or reported by the manufacturer.

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not normally reactive.
Chemical stability : Stable under the recommended storage and handling conditions prescribed.
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.
Conditions to avoid : Keep away from excessive heat, open flames, sparks and other possible sources of ignition. Avoid contact with water.
Incompatible materials : See Section 7 (Handling and Storage) for further details.
Hazardous decomposition products : None known, refer to hazardous combustion products in Section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Routes of entry inhalation : YES
Routes of entry skin & eye : YES
Routes of entry Ingestion : NO
Routes of exposure skin absorption : NO

Potential Health Effects:

Signs and symptoms of short-term (acute) exposure

Sign and symptoms Inhalation

: Inhalation of dust may cause shortness of breath, tightness of the chest, a sore throat and cough.

Sign and symptoms ingestion

: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Sign and symptoms skin

: Causes skin irritation. If the article is damaged or processed (e.g. cut), hazardous properties may include the following: Splinters may produce septic wounds that may take an extremely long time to heal.

Sign and symptoms eyes

: Causes eye irritation. Symptoms may include tearing, redness and discomfort.

Potential Chronic Health Effects

: Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin.

Mutagenicity : Not expected to be mutagenic.

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Carcinogenicity : This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Carcinogenicity - Category 1A Wood dust is listed by IARC (Group 1). Formaldehyde is classified as carcinogenic by IARC (Group 1), ACGIH (Group A2) and NTP (Group 2). May cause cancer.

Reproductive effects & Teratogenicity

: Not expected to cause reproductive effects.

Sensitization to material : This material is classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Skin sensitization - Category 1A May cause an allergic skin reaction.

Specific target organ effects : This material is not classified as hazardous under U.S. OSHA regulations (29CFR 1910.1200) (Hazcom 2012) and Canadian WHMIS regulations (Hazardous Products Regulations) (WHMIS 2015). Classification: Specific Target Organ Toxicity, Repeated Exposure - Category 2 May cause damage to organs through prolonged or repeated exposure.

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Medical conditions aggravated by overexposure

: Pre-existing skin, eye and respiratory disorders.

Synergistic materials

: Not available.

Toxicological data

: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC₅₀(4hr)</u> <u>inh, rat</u>	<u>LD₅₀</u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
Wood / Wood Dust	N/Av	N/Av	N/Av
Polymeric MDI	0.49 mg/L (mist)	> 10 000 mg/kg	> 10 000 mg/kg
Formaldehyde	287 ppm	800 mg/kg (rat) The estimated human lethal dose is: 317 - 475 mg/kg	300 mg/kg

Other important toxicological hazards

: See Section 2 for additional information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity : Not expected to be harmful to aquatic organisms. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters.

Ecotoxicity data:

<u>Ingredients</u>	<u>CAS No</u>	<u>Toxicity to Fish</u>		
		<u>LC₅₀ / 96h</u>	<u>NOEC / 21 day</u>	<u>M Factor</u>
Wood / Wood Dust	Proprietary	N/Av	N/Av	N/Av
Polymeric MDI	9016-87-9	> 1000 mg/L (Zebra fish) (Read-across)	N/Av	None.
Formaldehyde	50-00-0	6.7 mg/L (Striped bass)	≥ 48 mg/L/28-day (Japanese ricefish)	None.

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<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Wood / Wood Dust	Proprietary	N/Av	N/Av	N/Av
Polymeric MDI	9016-87-9	N/Av	≥ 10 mg/L (Daphnia magna) (Read-across)	None.
Formaldehyde	50-00-0	5.8 mg/L (Daphnia magna)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Wood / Wood Dust	Proprietary	N/Av	N/Av	N/Av
Polymeric MDI	9016-87-9	> 1640 mg/L/72hr (Green algae) (Read-across)	1640 mg/L/72hr (Read-across)	None.
Formaldehyde	50-00-0	14.7 mg/L/24hr (Green algae)	N/Av	None.

Persistence and degradability : The product itself has not been tested.

Bioaccumulation potential : The product itself has not been tested.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Wood / Wood Dust (CAS Proprietary)	N/Av	N/Av
Polymeric MDI (CAS 9016-87-9)	4.51 (Read-across)	
Formaldehyde (CAS 50-00-0)	0.35	3

Mobility in soil : The product itself has not been tested.




Other Adverse Environmental effects : None known.

SECTION 13. DISPOSAL CONSIDERATIONS

- Handling for Disposal** : Handle waste according to recommendations in Section 7.
- Methods of Disposal** : Dispose in accordance with all applicable federal, state, provincial and local regulations.
- RCRA** : If this product, as supplied, becomes a waste in the United States, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. It is the responsibility of the waste generator to determine the proper waste identification and disposal method. For disposal of unused or waste material, check with local, state and federal environmental agencies.

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SECTION 14. TRANSPORTATION INFORMATION

Regulatory Information	UN Number	UN proper shipping name	Transport hazard class(es)	Packing Group	Label
49CFR/DOT	None.	Not regulated.	Not regulated	none	
49CFR/DOT Additional information	None.				
TDG	None.	Not regulated.	Not regulated	none	
TDG Additional information	None.				
ICAO/IATA	None.	Not regulated.	Not regulated	none	
ICAO/IATA Additional information	None.				

- Special precautions for user** : Keep away from heat, sparks and open flame. - No smoking.
- Environmental hazards** : This product does not meet the criteria for an environmentally hazardous mixture, according to the IMDG Code. See ECOLOGICAL INFORMATION, Section 12.
- Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**
 : Not available.

SECTION 15 - REGULATORY INFORMATION

US Federal Information:

Components listed below are present on the following U.S. Federal chemical lists:

<u>Ingredients</u>	CAS #	TSCA Inventory	CERCLA Reportable Quantity(RQ) (40 CFR 117.302):	SARA TITLE III: Sec. 302, Extremely Hazardous Substance, 40 CFR 355:	SARA TITLE III: Sec. 313, 40 CFR 372, Specific Toxic Chemical	
					Toxic Chemical	de minimus Concentration
Wood / Wood Dust	Proprietary	Yes	None.	None.	No	N/Ap
Polymeric MDI	9016-87-9	Yes	None.	None.	Yes	1%
Formaldehyde	50-00-0	Yes	100 lbs / 45.4 kg	500 lb TPQ	Yes	0.1%

SARA TITLE III: Sec. 311 and 312, SDS Requirements, 40 CFR 370 Hazard Classes: Acute Health Hazard ;Chronic Health Hazard. Under SARA Sections 311 and 312, the EPA has established threshold quantities for the reporting of hazardous chemicals. The current thresholds are 500 pounds for the threshold planning quantity (TPQ), whichever is lower, for extremely hazardous substances and 10,000 pounds for all other hazardous chemicals.

US State Right to Know Laws:

The following chemicals are specifically listed by individual States:

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<u>Ingredients</u>	CAS #	California Proposition 65		State "Right to Know" Lists					
		Listed	Type of Toxicity	CA	MA	MN	NJ	PA	RI
Wood / Wood Dust	Proprietary	No	N/Ap	No	No	No	No	No	No
Polymeric MDI	9016-87-9	No	N/Ap	No	No	No	Yes	No	No
Formaldehyde	50-00-0	Yes	Cancer (gas)	Yes	Yes	Yes	Yes	Yes	Yes

Canadian Information:

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

Refer to Section 2 for a WHMIS Classification for this product.

International Information:

Components listed below are present on the following International Inventory list:

<u>Ingredients</u>	CAS #	European EINECS	Australia AICS	Philippines PICCS	Japan ENCS	Korea KECI/KECL	China IECSC	NewZealand IOC
Wood / Wood Dust	Proprietary	N/Av	N/Av	N/Av	N/Av	N/Av	N/Av	N/Av
Polymeric MDI	9016-87-9	Polymer	Present	Present	(7)-872	KE-21487	Present	HSR003222
Formaldehyde	50-00-0	200-001-8	Present	Present	(2)-482	KE-17074	Present	HSR001584, HSR001162, HSR001518, HSR001583 (dilution)

SECTION 16. OTHER INFORMATION

Legend

- : ACGIH: American Conference of Governmental Industrial Hygienists
- CA: California
- CAS: Chemical Abstract Services
- CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
- CFR: Code of Federal Regulations
- DOT: Department of Transportation
- EPA: Environmental Protection Agency
- HMIS: Hazardous Materials Identification System
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- MA: Massachusetts
- MN: Minnesota
- N/Ap: Not Applicable
- N/Av: Not Available
- NFPA: National Fire Protection Association
- NIOSH: National Institute of Occupational Safety and Health
- NJ: New Jersey
- NTP: National Toxicology Program
- OSHA: Occupational Safety and Health Administration
- PA: Pennsylvania
- PEL: Permissible exposure limit
- RCRA: Resource Conservation and Recovery Act
- RI: Rhode Island
- RTECS: Registry of Toxic Effects of Chemical Substances
- SARA: Superfund Amendments and Reauthorization Act
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values

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TPQ: Threshold Planning Quantity
TSCA: Toxic Substance Control Act
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Identification System

References

- : 1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2016
- 2. International Agency for Research on Cancer Monographs, searched 2016.
- 3. Canadian Centre for Occupational Health and Safety, CCHInfoWeb databases, 2016 (Chempendium, HSDB and RTECs).
- 4. Material Safety Data Sheets from manufacturer.
- 5. US EPA Title III List of Lists
- 6. California Proposition 65 List

Preparation Date (mm/dd/yyyy)

: 06/06/2016

Other special considerations for handling

: Provide adequate information, instruction and training for operators.

<p><u>Prepared for:</u> Tolko Industries Ltd 3000 28 Street Vernon, BC, Canada, V1T 9W9 Telephone: 250-550-2512 Direct all enquiries to: Tolko Industries Ltd.</p>	
<p><u>Prepared by:</u> ICC The Compliance Center Inc. Telephone: (888) 442-9628 (U.S.): (888) 977-4834 (Canada) http://www.thecompliancecenter.com</p>	

DISCLAIMER

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