

KENTWOOD™ PRO MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name	Kentwood Pro Elastomeric Flooring Adhesive
MSDS name	KPEFA – 19298
CAS#	Mixture
Product use	Hardwood Flooring Adhesive
Generic description	Moisture Cure Polyurethane Based Formulation
Manufacturer	Kentwood Floors Inc. 718 Eaton Way, Delta B.C. Canada V3M 6J9
24 hour emergency assistance	Telephone (Canada, USA) 1-800-424-9300 (Other countries) 1-703-527-3887
General assistance	Telephone 604-395-2034
MSDS Assistance	Telephone 604-395-2034

2. Hazards Identification

Emergency overview Contact with this material can cause irritation to the skin, eyes and mucous membranes. Thermal decomposition/burning may produce toxic gases and fumes. Closed containers may rupture when exposed to high temperatures, or when the product has been contaminated with water. Avoid breathing hot mists and vapors. This product contains a respiratory and skin sensitizer. Causes respiratory tract irritation and may cause allergic respiratory reaction. May cause permanent respiratory damage. Product vapors are potentially irritating to skin. May cause allergic skin reaction and dermatitis.

Potential health effects

Eyes	This product may cause irritation to the eyes. May cause temporary corneal injury.
Skin	This product may cause irritation to the skin. Isocyanates may react with skin protein and moisture to cause itching, reddening, swelling, scaling or blistering. Individuals previously sensitized to this material may experience these symptoms from exposure to very small amounts of liquid or vapor.
Inhalation	This product may cause irritation to the respiratory system. Single large dose, and/or repeated exposures, may lead to sensitization to diisocyanates or polyisocyanates (asthma or asthma-like symptoms), causing an individual to experience adverse effects at exposure levels well below exposure limits or guidelines. Symptoms may include chest tightness, wheezing, shortness of breath, coughing or asthmatic attack, and may be delayed up to several hours. Extreme asthmatic reactions can be life threatening. Once sensitized, an individual may experience adverse symptoms upon exposure to dust, cold air or other irritants. Sensitization can last several months, years or be permanent in some cases.
Ingestion	Ingestion can cause gastrointestinal irritation, nausea, vomiting and diarrhea. This product may produce corrosive damage to the gastrointestinal tract if it is swallowed. Small amounts of this product, if aspirated into the lungs, may cause mild to severe pulmonary injury.
Target organs	The lungs and skin may be targeted and damaged by components of this

	product.
Signs and symptoms	Signs and symptoms of overexposure to this product include headache, irritation of upper respiratory tract, asthmatic symptoms, chest tightness, breathing difficulty, coughing, sore throat, eye irritation, skin irritation and/or diarrhea.
Hazard statements	This product contains Methylene Diphenyl Isocyanate (MDI) which is a potential skin sensitizer and has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity. Risk to your health depends on duration and concentration of exposure.

3. Composition / Information on Ingredients

Hazardous Components	CAS #	Percent
Stoddard solvent	8052-41-3	3 - 7
Methylene Diphenyl Isocyanate (MDI)	101-68-8	0.1 – 1

4. First Aid Measures

First aid procedures

Eye Contact	Immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention or advice.
Skin Contact	For skin contact flush with large amounts of water while removing contaminated clothing. If skin irritation persists, call a physician. For severe exposure, immediately get under a safety shower and begin rinsing.
Inhalation	If inhaled, immediately remove the affected person to fresh air. Call a physician if symptoms develop or persist. Administer oxygen or artificial respiration as needed.
Ingestion	If the material is swallowed, get immediate medical attention or advice. Do not induce vomiting without medical advice. Never give anything by mouth to a victim who is unconscious or is having convulsions.

Notes to physician

Provide general supportive measures and treat symptomatically. Contact Kentwood to determine whether any additional information is available.

Eyes: Stain for evidence of corneal injury. If cornea is burned, apply antibiotic/steroid preparation as needed.

Skin: This product contains a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn.

Ingestion: Treat symptomatically.

Inhalation: This material contains a known pulmonary sensitizer. Any individual experiencing dermal or pulmonary sensitization should be removed from exposure to any diisocyanate. May aggravate existing heart conditions, particularly those with abnormal heart rhythms. If overexposure to the solvents in this product is suspected, testing should include nervous system and brain effects including recent memory, mood, concentration, headache and altered sleep patterns. Liver and kidney function should be evaluated. This material, if aspirated into the lungs, may cause chemical pneumonitis; treat the affected person appropriately.

5. Fire Fighting Measures

Hazardous combustion products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Additional decomposition products include oxides of nitrogen, amines, hydrogen cyanide and
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isocyanate-containing compounds.

Extinguishing media

Suitable extinguishing media

Dry chemical, foam, carbon dioxide, water fog.

Fire fighting equipment / instructions

Firefighters should wear full protective clothing including self-contained breathing apparatus. Avoid contact with isocyanates. During a fire, isocyanate vapors and other irritating and highly toxic gases may be produced.

Flash point

145 °F (62.8 °C)

6. Accidental Release Measures

Emergency action

Wear appropriate personal protective equipment. Do not allow product to enter sewer or waterways. Follow all Local, State, Federal and Provincial regulations for disposal. Regulations vary. Consult local authorities before disposal.

Spill or leak procedure

Scrape up material and place in steel drums that are in good condition. Thoroughly clean area where spill occurred.

Containment procedures

Isolate spill area. Stop discharge if safe to do so. Stop material from contaminating soil or from entering sewers or water streams. Liquid spills: Cover spills with absorbent clay or sawdust and collect material in open container and neutralize with a solution containing 2% liquid detergent, 3% concentrated ammonium hydroxide and 95% water. Wash spill area clean with the neutralization solution. Remove container to a safe place, cover loosely and allow to stand for 24 to 48 hours letting evolved carbon dioxide escape. Collect and contain for disposal.

Pellet or chip spill: Collect and contain for salvage or disposal. Molten adhesive spill: Placard hot material, allow to cool and remove. If material is not cured once cooled, follow neutralization directions for liquids listed above. Collect and contain for disposal.

Reporting

See Federal reporting requirements listed in Section 15. We recommend you contact local authorities to determine if there may be other local reporting requirements.

7. Handling and Storage

Handling

Do not get this material in your eyes, on your skin, or on your clothing. Wash hands after handling and before eating. Do not breathe gas/fumes/vapor/spray. Wear respiratory protection if the material is heated, sprayed, used in a confined space or if exposure limit is exceeded. This product can produce asthmatic sensitization. Individuals with lung or breathing problems or prior allergic reactions to isocyanates must avoid fumes from this product. Wear appropriate protective equipment to avoid contact with skin and eyes.

Storage

Keep in a dry, cool and well-ventilated place. Keep away from heat. Keep away from direct sunlight.

Empty container precaution

Attention! Follow label warnings even after container is emptied since empty containers may retain product residues. Do not reuse empty container without professional cleaning for food, clothing, or products for human or animal consumption, or where skin contact can occur.

8. Exposure Controls / Personal Protection

Engineering controls

Provide local and general exhaust ventilation to effectively remove and prevent buildup of any vapors or mists generated from the handling of this

product.

Personal protective equipment

Eye protection	Wear safety glasses with side shields.
Skin and body protection	Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves.
Respiratory protection	Avoid breathing vapor and/or mists. If airborne concentrations are above the applicable exposure limits, use NIOSH approved respiratory protection. High airborne concentrations may necessitate the use of self-contained breathing apparatus (SCBA) or a supplied air respirator.
General	Eyewash fountains and emergency showers should be readily available.

Additional exposure data

US ACGIH Threshold Limit Values: Time Weighted Average (TWA): mg/m³ & ppm

Methylene Diphenyl Isocyanate (MDI)	101-68-8	METHYLENE BISPHENYL ISOCYANATE (MDI)	0.005 PPM
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Stoddard Solvent	8052-41-3	STODDARD SOLVENT	100 PPM
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US NIOSH Pocket Guide to Chemical Hazards: Ceiling Limit Value and Time Period (if specified)

Methylene Diphenyl Isocyanate (MDI)	101-68-8	METHYLENE BISPHENYL ISOCYANATE	0.2 MGM ³ - 0.020 PPM	10-min.
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Stoddard Solvent	8052-41-3	STODDARD SOLVENT	1800 MGM ³	15-min.
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US OSHA Table Z-1-A: Time Weighted Average (TWA): mg/m³ & ppm

Stoddard Solvent	8052-41-3	STODDARD SOLVENT	525 MGM ³ – 100 PPM
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9. Physical & Chemical Properties

Target solids	95%
Density	1.649 g/cc
Odor	Slight
Color	White
Physical state	Paste
Freeze protect	No
VOC (Volatile Organic Compounds)	85 g/l

10. Chemical Stability & Reactivity Information

Hazardous reactions / decomposition products	Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons. Additional decomposition products include oxides of nitrogen, amines, hydrogen cyanide and isocyanate-containing compounds.
Hazardous polymerization	Hazardous polymerization can occur with elevated temperatures or contact with water.
Conditions to avoid	Avoid strong acids. Avoid amines, strong bases, alcohols and metallic hydrides.
Stability	This product is stable under normal conditions but will react slightly with water to release some heat and carbon dioxide. The reaction is not violent. Carbon dioxide, carbon monoxide and in high temperature (800 °F) low oxygen atmospheres such as in fire situations, hydrogen cyanide may be released.

11. Toxicological Information

Carcinogenicity If this product contains any carcinogens, they will be noted below:
This product contains Methylene Diphenyl Isocyanate (MDI). MDI is not listed by the NTP, IARC or regulated by OSHA as a carcinogen. However, it has been shown to alter cells in certain experiments. Although inconclusive, these cellular changes are thought to indicate potential carcinogenicity.

Local effects Single large doses and/or repeated exposures, may lead to sensitization to diisocyanates or polyisocyanates (asthma or asthma-like symptoms), causing an individual to experience adverse effects at exposure levels well below exposure limits or guidelines. Symptoms may include chest tightness, wheezing, shortness of breath, coughing or asthmatic attacks, and may be delayed up to several hours. Extreme asthmatic reactions can be life threatening. Once sensitized, an individual may experience adverse symptoms upon exposure to dust, cold air or other irritants. Sensitization can last several months, years or be permanent in some cases. Chronic exposure may cause lung damage, including fibrosis and decreased lung function which may be permanent.

12. Ecological Information

Ecotoxicological Information Organic solvents produce slight to moderate toxicity to aquatic life.

13. Disposal Considerations

It is the obligation of each user of the product mentioned herein to determine and comply with the requirements of all applicable local, state and federal regulations.

Waste disposal Dispose of waste according to Local, State, Federal and Provincial Environmental Regulations.

14. Transport Information

DOT Not regulated as hazardous goods
IATA Not regulated as hazardous goods
IMDG Not regulated as hazardous goods

15. Regulatory Information

This MSDS is prepared and distributed pursuant to the Federal Hazard Communication Standard, 29 CFR 1910.1200.

The product(s) covered by this M(SDS) do not include any of the 15 substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by ECHA on October 28, 2008 or the list of 15 substances proposed on August 31, 2009 or the list of 14 substances proposed on January 13, 2010 above a concentration of 0.1% weight by weight (w/w).

Federal regulations All components are on the U.S. EPA TSCA Inventory list

US EPCRA (SARA Title III) Section 313 – Toxic Chemical: Listed Substance

Methylene Diphenyl Isocyanate 101-68-8 METHYLENEBIS(PHENYLISOCYANATE) (MDI) US EPCRA (MDI) (SARA Title III) Section 313 – Toxic Chemical: Listed Substance

State regulations This product may contain an ingredient(s) known to the State of California to cause cancer, birth defects and/or other reproductive harm. If any of the ingredients in this product are subject to the Proposition 65 regulations they will be listed as such on the product label.

International regulations This product has been classified in accordance with the hazard criteria of

the Controlled Products Regulations and contains all the information required by the Controlled Products Regulations.

All components are included on the Canadian Domestic Substances List (DSL).

HMIS Ratings

Health 2*

Flammability: 2

Physical Hazard: 0

Personal protection: X

SARA 311/312 HAZARD CATEGORIES

Immediate Hazard – Yes

Delayed Hazard – Yes

Fire Hazard – Yes

Pressure Hazard – No

Reactivity Hazard – No

WHMIS status

Controlled

WHMIS labeling



WHMIS classification

B3- Flammable/Combustible

D2A – Other Toxic Effects – VERY TOXIC

D2B – Other Toxic Effects – TOXIC

16: Other Information

Disclaimer

The data in this MSDS has been compiled from publicly available sources. This data relates only to the designated product and not to the use of said product in combination with other materials. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist. Responsibility for proper precautions and safe use of the product lies with the user. All data in this MSDS is typical of the product as a whole, and does not represent any individual lot or batch, therefore Kentwood Floors Inc. makes no warranty about the accuracy of the data herein and assumes no liability for the use of such data. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations.

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May 7, 2010

Prepared by

Kentwood Floors Inc. from data provided by the manufacturer, Bostik Inc.