Printing date 06/05/2015 Version No. 2 Reviewed on 06/05/2015

1 Identification

- · Trade name: Pall-X Bond Comp. B
- · Relevant identified uses of the substance or mixture and uses advised against
- · Sector of Use For professional use only.
- · Application of the substance / the mixture

Water-based 2-component pure polyurethane primer (component B)

- · Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Manufacturer:

PALLMANN GmbH

Im Kreuz 6

D-97076 Würzburg

Germany

Phone +49 931-27964-0

Fax +49 931-27964-50

Supplier:

UFLOOR Systems Inc.

14509 E. 33rd. Place, Unit G

Aurora, CO 80011 Phone: +720-374-4810 Toll-Free: +1 866-505-4810 Fax: +1 720-374-2113

· Information department:

Products Development Lab E-Mail: msds.info@uzin-utz.com

· Emergency telephone number:

For Chemical Emergency Spill Leak Fire Exposure or Accident

Call CHEMTREC Day or Night: DOMESTIC NORTH AMERICA 800-424-9300

International, call +49 621 60 43 333

2 Hazard(s) identification

· Classification of the substance or mixture



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

Skin Sens. 1 H317 May cause an allergic skin reaction. STOT SE 3 H335 May cause respiratory irritation.

Flam. Liq. 4 H227 Combustible liquid.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · Label elements
- · GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard-determining components of labeling:

Hydrophilic aliphatic polyisocyanate

· Hazard statements

Combustible liquid.

Harmful if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

(Contd. on page 2)

Printing date 06/05/2015 Version No. 2 Reviewed on 06/05/2015

Trade name: Pall-X Bond Comp. B

(Contd. of page 1)

Harmful to aquatic life with long lasting effects.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Avoid breathing vapours.

Wear protective gloves / eye protection.

If on skin: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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

Dispose of contents/container in accordance with local/regional/national/international regulations.

· NFPA ratings (scale 0 - 4)



Health = 1Fire = 2Reactivity = 0

· HMIS-ratings (scale 0 - 4)



1 Health = 1 Fire = 2

· Other hazards

NFPA Rating Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe.

NFPA is the National Fire Protection Association.

HMIS Rating Scale: 0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe.

HMIS®, the Hazardous Materials Identification System, is a registered mark of the National Paint and Coatings Association (NPCA).

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · **Description:** Mixture of the substances listed below with nonhazardous additions.

· Dangerous components:				
160994-68-3 Hydrophilic aliphatic polyisocyanate				
	Flam. Liq. 3, H226; Acute Tox. 4, H332; Skin Sens. 1, H317; STOT SE 3, H335; Aquatic Acute 3, H402; Aquatic Chronic 3, H412			
111109-77-4	- T L	25-50%		
	Flam. Liq. 4, H227			

· Additional information: For the wording of the listed risk phrases refer to section 16.

4 First-aid measures

- · Description of first aid measures
- · General information:

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

- · After inhalation: In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing: Do not induce vomiting; immediately call for medical help.

(Contd. on page 3)

Printing date 06/05/2015 Version No. 2 Reviewed on 06/05/2015

Trade name: Pall-X Bond Comp. B

(Contd. of page 2)

- · Information for doctor:
- · Most important symptoms and effects, both acute and delayed Allergic reactions
- $\cdot \textit{Indication of any immediate medical attention and special treatment needed}$

No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents:

CO₂ extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.
- · Additional information: Flash point: 66 °C (151°F)

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- · Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling

Avoid contact with the eyes and skin.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Wash hands before breaks and at the end of work.

- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Control parameters
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

(Contd. on page 4)

Printing date 06/05/2015 Version No. 2 Reviewed on 06/05/2015

Trade name: Pall-X Bond Comp. B

(Contd. of page 3)

- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Avoid contact with the eyes and skin.

Persons with a history of asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this preparation is used.

Wash hands before breaks and at the end of work.

- · Breathing equipment: Not necessary. Ensure that room is well-ventilated during processing.
- · Protection of hands:



Use gloves of stable material (e.g. Nitrile) - if necessary tricoted to improve the wearability.

· Material of gloves

Butyl rubber, BR Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.5 mm

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

9 Physical	l and	C	hemical	<i>properties</i>
------------	-------	---	---------	-------------------

. Intormation a	an hacie	nuveral	and c	nomical	nranarties
· Information o	m nasa i	minimu	unu ci	uemucui	monetues
					F · · F · · · · · ·

· General Information

· Appearance:

Form: Fluid Color: Yellowish

· Odor: Weak, characteristic · Odour threshold: Not determined.

Not determined. · pH-value:

· Change in condition

Undetermined. Melting point/Melting range: Undetermined. Boiling point/Boiling range: · Flash point: 66 °C (151 °F)

465 °C (869 °F) · Ignition temperature:

· Decomposition temperature: Not determined.

· Auto igniting: Product is not selfigniting.

· Danger of explosion: Product does not present an explosion hazard.

Not determined.

· Explosion limits:

· Vapor pressure:

Not determined. Lower: Not determined. Upper:

1.08 g/cm³ (9.013 lbs/gal)

· Density at 20 °C (68 °F):

· Relative density Not determined.

(Contd. on page 5)

Printing date 06/05/2015 Version No. 2 Reviewed on 06/05/2015

Trade name: Pall-X Bond Comp. B

(Contd. of page 4)

Vapour densityEvaporation rateNot determined.

· Solubility in / Miscibility with

Water: Not miscible or difficult to mix.

· Partition coefficient (n-octanol/water): Not determined.

· Viscosity:

 Dynamic:
 Not determined.

 Kinematic at 20 °C (68 °F):
 32 s (DIN 53211/4)

· Other information No further relevant information available.

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- · Thermal decomposition / conditions to be avoided:

From approx. 260 °C, polymerization and separation of CO₂.

· Possibility of hazardous reactions

The product reacts slowly with water resulting in evolution of carbon dioxide. In closed containers, pressure build up could result in distortion, blowing and in extreme cases bursting of the container.

- · Conditions to avoid No further relevant information available.
- · Incompatible materials:

Uncontrolled exothermic reactions occur with amines and alcohols.

During storage, avoid moisture contamination.

· Hazardous decomposition products:

In a fire, hazardous decomposition products such as smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, monomer isocyanates, amines and alcohols may be produced.

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · Specific symptoms in biological assay:
- · Primary route(s) of entry: Inhalation, skin contact, eye contact, ingestion.
- · Primary irritant effect:
- · on the skin: Slightly irritant effect may occur.
- · on the eye: No irritant effect.
- · Sensitization: Sensitization possible through skin contact.

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Irritant

Based on the properties of the isocyanate components and considering toxicological data on similar preparations, this preparation may cause acute irritation and/or sensitization of the respiratory system leading to an asthmatic condition, wheeziness and a tightness of the chest. Sensitized persons may subsequently show asthmatic symptoms when exposed to atmospheric concentrations well below the OEL. Repeated exposure may lead to permanent respiratory disability.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

(Contd. on page 6)

Trade name: Pall-X Bond Comp. B

(Contd. of page 5)

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Harmful to aquatic organisms

Do not allow product to reach ground water, water course or sewage system.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- · Recommendation:

The product contains materials that are harmful to the environment.

Do not allow product to reach ground water, water course or sewage system.

Disposal should be in accordance with local, state or national legislation.

- · Uncleaned packagings:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

14 Transport information

· DOT	NA1993
· ADR, ADN, IMDG, IATA	Void
· UN proper shipping name	
$\cdot DOT$	COMBUSTIBLE LIQUID, N.O.S (Dipropylenglycoldimethylether)
· ADR, ADN, IMDG, IATA	Void
· DOT	
· Class	3 Combustible liquids
· ADN/R Class:	Void
· IMDG, IATA	Void
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Not applicable.

(Contd. on page 7)

Printing date 06/05/2015 Version No. 2 Reviewed on 06/05/2015

Trade name: Pall-X Bond Comp. B

(Contd. of page 6)

- · Transport/Additional information: Not regulated as hazardous material according to the above specifications.
- · UN "Model Regulation":

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · SARA (Superfund Amendments and Reauthorization Act)
- · Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65 (California)
- · Chemicals known to cause cancer:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

- · Hazard pictograms GHS07
- · Signal word Warning
- · Hazard-determining components of labeling:

Hydrophilic aliphatic polyisocyanate

· Hazard statements

Combustible liquid.

Harmful if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

Harmful to aquatic life with long lasting effects.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

Avoid breathing vapours.

Wear protective gloves / eye protection.

If on skin: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

If experiencing respiratory symptoms: Call a poison center.

(Contd. on page 8)

Trade name: Pall-X Bond Comp. B

(Contd. of page 7)

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national/international regulations.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Recommended restriction of use For professional use only.

· Contact:

USA: Daniel Gill, phone + 1 720-374-4810 Germany: Dr. Koette, Tel. +49 931.279.6425

· Date of preparation / last revision 06/05/2015 / 1

· Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Flam. Liq. 4: Flammable liquids, Hazard Category 4

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

 $A quatic\ Acute\ 3:\ Hazardous\ to\ the\ aquatic\ environment\ -\ Acute Hazard,\ Category\ 3$

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

* Data compared to the previous version altered.

HS