

Safety Data Sheet

Titebond II Premium Wood Glue TRI 5

Section 1. Identification

| GHS product identifier | : Titebond II Premium Wood Glue TRI 5 |
|----------------------------------|--|
| Other means of identification | : None known. |
| Product type | : Liquid. |
| CAS # | : mixture |
| Address | : Franklin International 2020 Bruck Street Columbus OH 43207 |
| Contact person | : Franklin Technical Services |
| Telephone | : (800) 877-4583 |
| In case of emergency | : Franklin Security (614) 445-1300 |
| Reference number | : 5000 |
| Product code | : 5007 |
| Date of revision | : 7/31/2015. |
| Print date | : 7/31/2015. |
| Chemtrec (24 Hour) | : (800) 424 - 9300 |
| Chemtrec International | : (703) 527 - 3887 |
| Chemical family | : Adhesive. |
| | · · · · · · · · · · · · · · · · · · · |

Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Industrial use wood glue.

Wide dispersive use of substances in professional and DIY adhesives.

Section 2. Hazards identification

| OSHA/HCS status | : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
|---|--|
| Classification of the substance or mixture | : Not classified. |
| | Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 7.2% |
| GHS label elements | |
| Signal word | : No signal word. |
| Hazard statements | : No known significant effects or critical hazards. |
| Precautionary statements | |
| General | Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. |
| Hazards not otherwise classified | : None known. |

Section 3. Composition/information on ingredients

Hazardous ingredients

United States

| Name | CAS number | % |
|-------------------------------|------------|-------|
| aluminium chloride, anhydrous | 7446-70-0 | 1 - 5 |

<u>Canada</u>

| Name | CAS number | % |
|-------------------------------|------------|-------|
| aluminium chloride, anhydrous | 7446-70-0 | 1 - 5 |

Г

<u>Mexico</u>

| Mexico | | | | | | | Classification | | | |
|----------------------------------|---------------|-----------|-------|------|---|---|----------------|---------|--|--|
| | CAS number | UN number | % | IDLH | н | F | R | Special | | |
| aluminium chloride, anhydrous | 7446-70-0 | UN3077 | 1 - 5 | - | 2 | 0 | 0 | - | | |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

| Eye contact | : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
|--------------|---|
| Inhalation | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, acute and delayed

Potential acute health effects Eye contact : No known significant effects or critical hazards. : No known significant effects or critical hazards. Inhalation : No known significant effects or critical hazards. Skin contact Ingestion : No known significant effects or critical hazards. Over-exposure signs/symptoms Eye contact : No specific data. Inhalation : No specific data. Skin contact : No specific data. Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Section 4. First aid measures

| Notes to physician | : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
|----------------------------|--|
| Specific treatments | : No specific treatment. |
| Protection of first-aiders | : No action shall be taken involving any personal risk or without suitable training. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

| Extinguishing media | |
|--|---|
| Suitable extinguishing media | : Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : None known. |
| Specific hazards arising from the chemical | : In a fire or if heated, a pressure increase will occur and the container may burst. |
| Hazardous thermal decomposition products | : Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides |
| Special protective actions for fire-fighters | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. Accidental release measures

| Personal precautions, protect | tiv | e equipment and emergency procedures |
|--------------------------------|-----|--|
| For non-emergency personnel | : | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. |
| For emergency responders | : | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| Environmental precautions | : | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| Methods and materials for co | nta | ainment and cleaning up |
| Small spill | : | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| Large spill | : | Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. |

Section 7. Handling and storage

| Precautions for safe handling | 1 |
|--|---|
| Protective measures | : Put on appropriate personal protective equipment (see Section 8). |
| Advice on general occupational hygiene | : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| Conditions for safe storage, including any incompatibilities | : Store between the following temperatures: 4.4444 to 32.222°C (40 to 90°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. |

Section 8. Exposure controls/personal protection

Control parameters

United States

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| | OSHA PEL 1989 (United States, 3/1989). Notes: as Al TWA: 2 mg/m³, (as Al) 8 hours. NIOSH REL (United States, 10/2013). Notes: as Al TWA: 2 mg/m³, (as Al) 10 hours. |

<u>Canada</u>

| Occupational exposure limits | | TWA (8 hours) | | | STEL (15 mins) | | | Ceiling | | | |
|---|-----------|---------------|-----------|-------|----------------|-----------|-------|---------|-----------|-------|-----------|
| Ingredient List name | | ppm | mg/ m³ | Other | ppm | mg/ m³ | Other | ppm | mg/ m³ | Other | Notations |
| aluminium chloride, anhydrous, as Al | AB 4/2009 | - | 2 | - | - | - | - | - | - | - | [3] |
| | QC 1/2014 | - | 2 | - | - | - | - | - | - | - | [A] |

[3]Skin sensitization **Notes:** [A]as Al

<u>Mexico</u>

Occupational exposure limits

| Ingredient | Exposure limits |
|-------------------------------|--|
| aluminium chloride, anhydrous | NOM-010-STPS (Mexico, 9/2000). LMPE-PPT: 2 mg/m ³ 8 hours. |

Consult local authorities for acceptable exposure limits.

| Appropriate engineering controls | : | Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
|----------------------------------|---|---|
| Environmental exposure controls | : | Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels. |

Individual protection measures

Section 8. Exposure controls/personal protection

| • | |
|------------------------|---|
| Hygiene measures | : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location. |
| Eye/face protection | : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. |
| Skin protection | |
| Hand protection | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |
| Body protection | : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Other skin protection | : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory protection | : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |

Section 9. Physical and chemical properties

| Appearance | |
|---|---|
| Physical state | : Liquid. |
| Color | : Yellow. |
| Odor | : Faint odor. |
| Odor threshold | : Not available. |
| рН | : 3 |
| Melting point | : Not available. |
| Boiling point | : 98.889°C (210°F) |
| Flash point | : Closed cup: >93.3°C (>199.9°F) [Setaflash.] |
| Evaporation rate | : <1 (butyl acetate = 1) |
| VOC (less water, less exempt solvents) | : 5.5 g/l |
| Relative density | : 1.09 |

Section 10. Stability and reactivity

| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
|------------------------------------|--|
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Hazardous reactions or instability may occur under certain conditions of storage or use. |
| Conditions to avoid | : No specific data. |
| Incompatible materials | : No specific data. |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | | ecies | Dose | Exposure |
|--|---|----------------------------|---------------|----------------------|--------------------------|
| aluminium chloride, anhydrous | LD50 Oral | Rat | | 3450 mg/kg | - |
| Conclusion/Summary | Not available. | | | | |
| Irritation/Corrosion | | | | | |
| Product/ingredient name | Result | Species | Scor | e Exposur | e Observation |
| aluminium chloride, anhydrous | Skin - Severe irritant | Mouse | - | 10 Perce | nt - |
| Skin - Severe irritant Skin - Severe irritant | Skin - Severe irritant Skin - Severe irritant | Pig Rabbit | - | 10 Perce 10 Perce | |
| Conclusion/Summary | | | I | | <u> </u> |
| Skin | : Prolonged or repeated or dermatitis. | contact can d | efat the skin | ı and lead to irrita | tion, cracking and/or |
| Eyes | : This product may irritate | e eyes upon (| contact. | | |
| Respiratory | : Inhalation of oil mist or | vapors at ele [,] | vated tempe | ratures may caus | e respiratory irritation |
| Information on the likely routes of exposure | : Routes of entry anticipa Routes of entry not antic | , | | | |
| Potential acute health effects | <u>)</u> | | | | |
| Eye contact | : No known significant ef | fects or critic; | al hazards. | | |
| Inhalation | : No known significant eff | fects or critic; | al hazards. | | |
| Skin contact | : No known significant eff | fects or critica | al hazards. | | |
| Ingestion | : No known significant eff | fects or critica | al hazards. | | |
| Symptoms related to the phy | vsical, chemical and toxic | <u>ological char</u> | acteristics | | |
| Eye contact | : No specific data. | | | | |
| Inhalation | : No specific data. | | | | |
| Skin contact | : No specific data. | | | | |
| Ingestion | : No specific data. | | | | |
| Delayed and immediate effec | ts and also chronic effect | <u>is from shor</u> f | and long t | <u>erm exposure</u> | |
| Short term exposure | | | | | |
| Potential immediate effects | : Not available. | | | | |
| Potential delayed effects | : Not available. | | | | |
| Long term exposure Potential immediate effects | : Not available. | | | | |
| Potential delayed effects | fects : Not available. | | | | |

Section 12. Ecological information

Toxicity

Section 12. Ecological information

| 0 | | | | | | |
|----------------------------------|---|---|----------------------|--|--|--|
| Product/ingredient name | Result | Species | Exposure | | | |
| aluminium chloride, anhydrous | Acute EC50 10.02 mg/l Fresh water | Algae - Desmodesmus subspicatus | 72 hours | | | |
| | Acute EC50 460 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours | | | |
| | Acute EC50 1500 µg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours | | | |
| | Acute LC50 3.65 mg/l Fresh water Acute LC50 610 μg/l Fresh water | Daphnia - Daphnia pulex - Adult Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) | 48 hours 96 hours | | | |

Conclusion/Summary : Not available.

Persistence and degradability

Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information DOT TDG Mexico ADR/RID IMDG ΙΑΤΑ Classification Classification Classification **UN number** Not regulated. Not regulated. Not regulated. Not regulated. Not regulated. Not regulated. **UN proper** shipping name Transport hazard class(es) Packing group **Environmental** No. No. No. No. No. No. hazards Additional _ _ _ information

Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 14. Transport information

Transport in bulk according : Not available. to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

| J.S. Federal regulations | : | TSCA 8 | (a) PAIR: 1-(2 | 2-butoxy- | 1-methyletho | ky)propan-2-ol | | |
|---|----|------------------|----------------|-----------|--------------|----------------|-----------------|----------------|
| | | TSCA 8 | (a) CDR Exe | mpt/Parti | al exemption | n: Not determi | ned | |
| | | United § 8b): | States inven | tory (TSC | All cor | nponents are I | isted or exempt | ed. |
| Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) | : | Not liste | d | | | | | |
| Clean Air Act Section 602 Class I Substances | : | Not liste | d | | | | | |
| Clean Air Act Section 602 Class II Substances | : | Not liste | d | | | | | |
| SARA 302/304 | | | | | | | | |
| Composition/information | on | <u>ingredier</u> | <u>nts</u> | | | | | |
| No products were found. | | | | | | | | |
| SARA 304 RQ | : | Not appl | icable. | | | | | |
| SARA 311/312 | | | | | | | | |
| Classification | : | Not appl | icable. | | | | | |
| Composition/information | on | <u>ingredier</u> | <u>nts</u> | | | | | |
| Name | | | % | Fire | Sudden | Reactive | Immediate | Delayed |

| Name | % | hazard | Sudden release of pressure | | (acute) health | Delayed (chronic) health hazard | |
|-------------------------------|-------|--------|----------------------------------|-----|-------------------|--|---|
| aluminium chloride, anhydrous | 1 - 5 | No. | No. | No. | Yes. | No. | l |

State regulations

Massachusetts

New York

New Jersey

- : The following components are listed: ALUMINUM CHLORIDE
- : None of the components are listed.

New Jersey Pennsylvania The following components are listed: ALUMINUM CHLORIDE
 The following components are listed: ALUMINUM CHLORIDE (ALCL3)

California Prop. 65

Not available.

| Ingredient name | Cancer | Reproductive | Maximum acceptable dosage level |
|-----------------|--------|--------------|---------------------------------------|
| Not applicable. | | | |

Canada

Canadian lists

Canadian NPRI

Canada inventory

: None of the components are listed.

CEPA Toxic substances

None of the components are listed.Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Section 15. Regulatory information

| <u>Mexico</u> | |
|---|--|
| Classification | : |
| | 1 Flammability |
| | Health 1 0 Reactivity |
| | Special |
| International regulations | |
| International lists | Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined. Japan inventory: Not determined. Korea inventory: Not determined. Malaysia Inventory (EHS Register): Not determined. New Zealand Inventory of Chemicals (NZIoC): Not determined. Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined. |
| Europe | : Not determined. |
| Chemical Weapons Convention List Schedule I Chemicals | : Not listed |
| Chemical Weapons Convention List Schedule II Chemicals | : Not listed |
| Chemical Weapons Convention List Schedule III Chemicals | : Not listed |

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)



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Section 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

| <u>History</u> | |
|--------------------------------|--|
| Date of printing | : 7/31/2015. |
| Date of issue/Date of revision | : 7/31/2015. |
| Date of previous issue | : 7/29/2015. |
| Version | : 4.3 |
| Key to abbreviations | ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations |
| References | : Not available. |

✓ Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. 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 that exist.