# Franklin International

# **Safety Data Sheet**

**Titebond Tongue & Groove Glue** 

### **Section 1. Identification**

| GHS product identifier                            | : | Titebond Tongue & Groove Glue                                    |
|---|---|--|
| Physical state                                    | : | Liquid.  |
| Address   | : | Franklin International<br>2020 Bruck Street<br>Columbus OH 43207 |
| Contact person                                    | : | Franklin Technical Services                                      |
| Telephone   | : | (800) 877-4583   |
| In case of emergency                              | : | Franklin Security<br>(614) 445-1300                              |
| e-mail address of person responsible for this SDS | : | SDS@FranklinInternational.com                                    |
| Reference number                                  | : | 6128   |
| Product code                                      | : | 2104   |
| Date of revision                                  | : | 8/6/2018   |
| Safety Data Sheets are available online at        | : | www.FranklinInternational.com                                    |
| Chemtrec (24 Hour)                                | : | (800) 424 - 9300   |
| Chemtrec International                            | : | (703) 527 - 3887   |
|   |   |  |

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

Not applicable.

# 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.  |
| GHS label elements                         |   |  |
| Signal word                                | : | No signal word.  |
| Hazard statements                          | : | No known significant effects or critical hazards.  |
| Precautionary statements                   |   |  |
| General                                    | : | Refer to safety data sheet before use. Avoid contact with skin and clothing. Wash thoroughly after handling. Get medical attention if needed. Contact Franklin International Technical Service for additional information at 1-800-877-4583.   |
| Prevention                                 | : | Not applicable.  |
| Response                                   | : | Not applicable.  |
| Storage                                    | : | Not applicable.  |
| Disposal                                   | : | Not applicable.  |
| Hazards not otherwise classified           | : | None known.  |

# Section 3. Composition/information on ingredients

Substance/mixture

aluminium chloride [Dry]

: Mixture

#### Ingredient name

CAS number 7446-70-0

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.

%

≤3

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

# Section 4. First aid measures

#### **Description of necessary first aid measures**

| beeding tion of heededdary his |   |
|--------------------------------|---|
| Eye contact                    | <ul> <li>Immediately flush eyes with plenty of water, occasionally lifting the upper and lower<br/>eyelids. Check for and remove any contact lenses. Get medical attention if irritation<br/>occurs.</li> </ul>   |
| Inhalation                     | : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if needed.   |
| Skin contact                   | <ul> <li>Flush contaminated skin with plenty of water. Remove contaminated clothing and<br/>shoes. Get medical attention if needed.</li> </ul>  |
| 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 needed. |
| Most important symptoms/e      | ffects, acute and delayed   |
| Potential acute health effect  | <u>xts</u>  |
| Eye contact                    | : This product may irritate eyes upon contact.  |
| Inhalation                     | : No known significant effects or critical hazards.   |
| Skin contact                   | : No known significant effects or critical hazards.   |
| Ingestion                      | : No known significant effects or critical hazards.   |
| Over-exposure signs/symp       | i <u>toms</u>   |
| Eye contact                    | : No specific data.   |
| Inhalation                     | : No specific data.   |
| Skin contact                   | : No specific data.   |
| Ingestion                      | : No specific data.   |
| Indication of immediate med    | lical attention and special treatment needed, if necessary  |
| Notes to physician             | <ul> <li>Treat symptomatically. Contact poison treatment specialist immediately if large<br/>quantities have been ingested or inhaled.</li> </ul>   |
| 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  | n (Section 11)  |

### Section 5. Fire-fighting measures

| Extinguishing media                        |  |                        |     |
|--|--|------------------------|-----|
| Suitable extinguishing media               | : Use an extinguishing agent suitable for the surrounding fir    | e.                     |     |
| Unsuitable extinguishing media             | : None known.  |                        |     |
| Specific hazards arising from the chemical | : In a fire or if heated, a pressure increase will occur and the | e container may burst. |     |
| Date of issue/Date of revision             | 8/6/2018   | Version : 1.01         | 2/9 |

# Section 5. Fire-fighting measures

| Hazardous thermal decomposition products          | : Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>halogenated compounds<br>metal oxide/oxides   |
|---|---|
| Special protective actions<br>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<br>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, protec                          | Personal precautions, protective equipment and emergency procedures |  |  |  |
|---|---|--|--|--|
| For non-emergency<br>personnel                        | :   | No action shall be taken involving any personal risk or without suitable training.<br>Evacuate surrounding areas. Keep unnecessary and unprotected personnel from<br>entering. Do not touch or walk through spilled material. Put on appropriate personal<br>protective equipment.   |  |  |
| For emergency responders                              | :   | If specialized 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<br>and sewers. Inform the relevant authorities if the product has caused environmental<br>pollution (sewers, waterways, soil or air).  |  |  |
| Methods and materials for containment 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

| 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,<br>including any<br>incompatibilities | : | Store between the following temperatures: 10 to 32.222°C (50 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. See Section 10 for incompatible materials before handling or use. |

# Section 8. Exposure controls/personal protection

#### **Control parameters**

**Occupational exposure limits** 

| Ingredient name                  | Exposi   | ure limits   |
|----------------------------------|--|--|
| aluminium chloride [Dry]         | TWA<br>NIOSH   | PEL 1989 (United States, 3/1989). Notes: as Al<br>2 mg/m <sup>3</sup> , (as Al) 8 hours.<br>I REL (United States, 10/2016). Notes: as Al<br>2 mg/m <sup>3</sup> , (as Al) 10 hours.  |
| Appropriate engineering controls | : Good general ventilation s contaminants.               | hould be sufficient to control worker exposure to airborne   |
| Environmental exposure controls  | they comply with the requi<br>cases, fume scrubbers, fil | or work process equipment should be checked to ensure<br>rements of environmental protection legislation. In some<br>ters or engineering modifications to the process equipment<br>e emissions to acceptable levels.   |
| Individual protection meas       | <u>ires</u>  |  |
| Hygiene measures                 | eating, smoking and using<br>Appropriate techniques sh   | d face thoroughly after handling chemical products, before<br>the lavatory and at the end of the working period.<br>would be used to remove potentially contaminated clothing.<br>Ing before reusing. Ensure that eyewash stations and safety<br>vorkstation location. |
| Eye/face protection              | assessment indicates this gases or dusts. If contact     | with an approved standard should be used when a risk<br>is necessary to avoid exposure to liquid splashes, mists,<br>is possible, the following protection should be worn, unless<br>a higher degree of protection: safety glasses with side-                          |
| Skin protection                  |  |  |
| Hand protection                  |  | vious gloves complying with an approved standard should be<br>ndling chemical products if a risk assessment indicates this is  |
| Body protection                  |  | ment for the body should be selected based on the task being<br>wolved and should be approved by a specialist before   |
| Other skin protection            |  | any additional skin protection measures should be selected<br>erformed and the risks involved and should be approved by a<br>this product.   |
| Respiratory protection           | appropriate standard or ce                               | potential for exposure, select a respirator that meets the<br>ertification. Respirators must be used according to a<br>gram to ensure proper fitting, training, and other important  |

# Section 9. Physical and chemical properties

| <u>Appearance</u>                         |   |
|---|---|
| Physical state                            | : Liquid.                                     |
| Color                                     | : Yellow. [Light]                             |
| Odor                                      | : Characteristic.                             |
| Odor threshold                            | : Not available.                              |
| рН  | : 3   |
| Melting point                             | : Not available.                              |
| Boiling point                             | : 98.889°C (210°F)                            |
| Flash point                               | : Closed cup: >93.333°C (>200°F) [Setaflash.] |
| VOC (less water, less<br>exempt solvents) | : 13.7 g/l                                    |
| Date of issue/Date of revision            | : 8/6/2018                                    |

### Section 9. Physical and chemical properties

#### Volatility Relative density

: 52% (w/w)

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 | : Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| 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   |                     | Species    |             | Dose       |  | Exposure               |
| aluminium chloride [Dry]                        | LD50 Oral  |                     | Rat        |             | 3450 mg/kg |  | -                      |
| Irritation/Corrosion                            |  |                     |            |             |            |  | <u> </u>               |
| Product/ingredient name                         | Result   | Spec                | ies        | Score       |            | Exposure                               | Observation            |
| aluminium chloride [Dry]                        | Skin - Severe irritant<br>Skin - Severe irritant<br>Skin - Severe irritant | Mous<br>Pig<br>Rabb |            | -<br>-<br>- |            | 10 Percent<br>10 Percent<br>10 Percent | -<br>-<br>-            |
| Conclusion/Summary                              |  |                     |            |             |            |  |                        |
| Skin  | : Prolonged or repeated co dermatitis.                                     | ontact ca           | an defat t | he skin     | and le     | ad to irritation                       | , cracking and/or      |
| Eyes  | : This product may irritate e  | eyes up             | on contac  | ct.         |            |  |                        |
| Respiratory                                     | : Inhalation of oil mist or va   | apors at            | elevated   | temper      | atures     | may cause r                            | espiratory irritation. |
| Sensitization                                   |  |                     |            |             |            |  |                        |
| Not available.                                  |  |                     |            |             |            |  |                        |
| Mutagenicity<br>Not available.                  |  |                     |            |             |            |  |                        |
| Carcinogenicity<br>Not available.               |  |                     |            |             |            |  |                        |
| Reproductive toxicity<br>Not available.         |  |                     |            |             |            |  |                        |
| Teratogenicity<br>Not available.                |  |                     |            |             |            |  |                        |
| Specific target organ toxicit<br>Not available. | <u>y (single exposure)</u>   |                     |            |             |            |  |                        |
| Specific target organ toxicit<br>Not available. | <u>y (repeated exposure)</u>   |                     |            |             |            |  |                        |
| Aspiration hazard                               |  |                     |            |             |            |  |                        |

5/9

# Section 11. Toxicological information

|  |     | 5  |
|--|-----|--|
| Not available.   |     |  |
| Information on the likely  | :   | Routes of entry anticipated: Oral, Inhalation.             |
| routes of exposure   |     | Routes of entry not anticipated: Dermal.                   |
| Potential acute health effects   |     |  |
| Eye contact  | ÷   | This product may irritate eyes upon contact.               |
| Inhalation   | ÷   | No known significant effects or critical hazards.          |
| Skin contact   | 4   | No known significant effects or critical hazards.          |
| Ingestion  |     | No known significant effects or critical hazards.          |
| Symptoms related to the physical sectors and the sector sectors and the sector sector sectors and the sector sectors are sectors and the sectors are s | sic | cal, chemical and toxicological characteristics            |
| Eye contact  | ÷   | No specific data.  |
| Inhalation   | 4   | No specific data.  |
| Skin contact   | 4   | No specific data.  |
| Ingestion  | 3   | No specific data.  |
|  | ts  | and also chronic effects from short and long term exposure |
| <u>Short term exposure</u>   |     |  |
| Potential immediate  | 1   | Not available.   |
| effects  |     | Natavailabla   |
| Potential delayed effects  | ÷   | Not available.   |
| Long term exposure<br>Potential immediate  |     | Not available.   |
| effects  | 1   | NUL available.   |
| Potential delayed effects  | :   | Not available.   |
| Potential chronic health effe  | ect | <u>s</u>   |
| Not available.   |     |  |
| General  | :   | No known significant effects or critical hazards.          |
| Carcinogenicity  | 1   | No known significant effects or critical hazards.          |
| Mutagenicity   | 1   | No known significant effects or critical hazards.          |
| Teratogenicity   | :   | No known significant effects or critical hazards.          |
| <b>Developmental effects</b>   | :   | No known significant effects or critical hazards.          |
| Fertility effects  | :   | No known significant effects or critical hazards.          |
|  |     |  |

#### Numerical measures of toxicity

Acute toxicity estimates

Not available.

# Section 12. Ecological information

#### **Toxicity**

| Product/ingredient name  | Result  | Species   | Exposure             |
|--------------------------|---|---|----------------------|
| aluminium chloride [Dry] | Acute EC50 10.02 mg/l Fresh water                                   | Algae - Desmodesmus<br>subspicatus  | 72 hours             |
|                          | Acute EC50 460 µg/l Fresh water                                     | Algae - Pseudokirchneriella subcapitata   | 96 hours             |
|                          | Acute EC50 1500 µg/l Fresh water                                    | Crustaceans - Ceriodaphnia<br>dubia - Neonate   | 48 hours             |
|                          | Acute LC50 3.65 mg/l Fresh water<br>Acute LC50 570 μg/l Fresh water | Daphnia - Daphnia pulex - Adult<br>Fish - Oncorhynchus mykiss -<br>Juvenile (Fledgling, Hatchling,<br>Weanling) | 48 hours<br>96 hours |

# Section 12. Ecological information

#### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

Not available.

#### Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

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<br>Classification | TDG<br>Classification | Mexico<br>Classification | ADR/RID        | IMDG           | ΙΑΤΑ           |
|-------------------------------|-----------------------|-----------------------|--------------------------|----------------|----------------|----------------|
| UN number                     | Not regulated.        | Not regulated.        | Not regulated.           | Not regulated. | Not regulated. | Not regulated. |
| UN proper<br>shipping name    | -                     | -                     | -                        | -              | -              | -              |
| Transport<br>hazard class(es) | -                     | -                     | -                        | -              | -              | -              |
| Packing group                 | -                     | -                     | -                        | -              | -              | -              |
| Environmental<br>hazards      | No.                   | No.                   | No.                      | No.            | No.            | No.            |

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 15. Regulatory information

#### **U.S. Federal regulations**

#### SARA 302/304

#### Composition/information on ingredients

No products were found.

#### SARA 304 RQ : Not applicable.

#### SARA 311/312 Classification

: Not applicable.

#### Composition/information on ingredients

| Name                     | % | Classification  |
|--------------------------|---|---|
| aluminium chloride [Dry] |   | SKIN CORROSION - Category 1B<br>SERIOUS EYE DAMAGE - Category 1 |

#### **State regulations**

Massachusetts

: The following components are listed: ALUMINUM CHLORIDE

**New York** 

: None of the components are listed.

New Jersey

- : The following components are listed: ALUMINUM CHLORIDE
- Pennsylvania
- : The following components are listed: ALUMINUM CHLORIDE

#### California Prop. 65

None of the components are listed.

#### International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

#### Inventory list

China

: Not determined.

United States TSCA 8(b) inventory

: All components are listed or exempted.

# Section 16. Other information

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

| Health           | 1 | 0 |
|------------------|---|---|
| Flammability     |   | 0 |
| Physical hazards |   | 0 |
|                  |   | - |

# Section 16. Other information

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 and the associated label are not required on SDSs or products leaving a facility 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 trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

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



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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.

#### Procedure used to derive the classification

|                                | Classification   | Justification |
|--------------------------------|--|---------------|
| Not classified.                |  |               |
| History                        |  |               |
| Date of printing               | : 8/6/2018   |               |
| Date of issue/Date of revision | : 8/6/2018   |               |
| Date of previous issue         | : 4/24/2018  |               |
| Version                        | : 1.01   |               |
| Key to abbreviations           | <ul> <li>ATE = Acute Toxicity Estimate<br/>BCF = Bioconcentration Factor<br/>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br/>IATA = International Air Transport Association<br/>IBC = International Air Transport Association<br/>IMDG = International Maritime Dangerous Goods<br/>LogPow = logarithm of the octanol/water partition coefficient<br/>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973<br/>as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br/>UN = United Nations</li> </ul> |               |
| 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.