

# Franklin International

## Safety Data Sheet

### Multibond EZ-1

#### Section 1. Identification

**Product name** : Multibond EZ-1  
**Product code** : 24111000  
**Other means of identification** : Not available.  
**Product type** : Liquid.  
**Address** : Franklin International  
2020 Bruck Street  
Columbus Ohio 43207  
**Contact person** : Franklin Technical Services  
**Telephone** : (800) 877-4583  
**In case of emergency** : (614) 445-1300  
**Reference number** : 6236  
**Product code** : 24111000  
**Date of revision** : 9/15/2017  
**Print date** : 9/15/2017  
**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.

**Supplier's details** : PCL Adhesives  
1/15 Trugood Drive, East Tamaki, Auckland, New Zealand  
09 271 3556  
**Emergency telephone number (with hours of operation)** : 0800 764 766  
24 hrs  
**e-mail address of person responsible for this SDS** : sds@FranklinInternational.com

#### Section 2. Hazards identification

**HSNO Classification** : 6.3 - SKIN IRRITATION - Category B  
6.4 - EYE IRRITATION - Category A (Irritant)

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

This material is not classified as DANGEROUS GOODS according to criteria in New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

#### GHS label elements

**Signal word** : Warning

## Section 2. Hazards identification

**Hazard statements** : Causes mild skin irritation.  
Causes serious eye irritation.

### Precautionary statements

**Prevention** : Read label before use. Wear eye or face protection. Keep out of reach of children. Wash thoroughly after handling. If medical advice is needed: Have product container or label at hand.

**Response** : If skin irritation occurs, get medical advice/attention. 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.

**Storage** : Not applicable.

**Disposal** : Not applicable.

**Symbol** :



**Other hazards which do not result in classification** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture

**Other means of identification** : Not available.

Ingredient name	% (w/w)	CAS number
aluminium chloride, anhydrous	1 - 5	7446-70-0
methanol	0.5 - 1	67-56-1

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

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Ingestion** : Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Section 4. First aid measures

- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

- Inhalation** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.
- Skin contact** : Causes mild skin irritation.
- Eye contact** : Causes serious eye irritation.

#### Over-exposure signs/symptoms

- Inhalation** : No specific data.
- Ingestion** : No specific data.
- Skin** : Adverse symptoms may include the following:  
irritation  
redness
- Eyes** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

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

- Specific treatments** : Not available.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : 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
- Hazchem code** : Not available.
- Special precautions 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, protective equipment and emergency procedures** : 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- 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 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. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

## Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Conditions for safe storage, including any incompatibilities** : Store between the following temperatures: 10 to 32°C (50 to 89.6°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. Separate from acids. 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

#### Occupational exposure limits

Ingredient name	Exposure limits
aluminium chloride, anhydrous  methanol	<b>NZ HSWA 2015 (New Zealand, 6/2016).</b> WES-TWA: 5 mg/m <sup>3</sup> , (as Al) 8 hours. <b>NZ HSWA 2015 (New Zealand, 6/2016).</b> <b>Absorbed through skin.</b> WES-TWA: 200 ppm 8 hours. WES-TWA: 262 mg/m <sup>3</sup> 8 hours. WES-STEL: 328 mg/m <sup>3</sup> 15 minutes. WES-STEL: 250 ppm 15 minutes.

## Section 8. Exposure controls/personal protection

**Appropriate engineering controls** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

**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

**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.

**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.

**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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Eye 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: chemical splash goggles.

**Skin 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.

## Section 9. Physical and chemical properties

### Appearance

**Physical state** : Liquid.

**Color** : Off-white.

**Odor** : Faint odor.

**Odor threshold** : Not available.

**pH** : 2.2 to 35

**Melting point** : Not available.

**Boiling point** : 100°C (212°F)

**Flash point** : Closed cup: Not applicable.

**Evaporation rate** : <1 (butyl acetate = 1)

**Flammability (solid, gas)** : Not available.

**Lower and upper explosive (flammable) limits** : Not available.

**VOC (less water, less exempt solvents)** : 9 g/l

## Section 9. Physical and chemical properties

Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 1.09
Volatility	: 52% (w/w)
Solubility	: Partially soluble in the following materials: cold water and hot water.
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Flow time (ISO 2431)	: Not available.

### Aerosol product

Type of aerosol	: Not applicable.
Heat of combustion	: Not available.
Ignition distance	: Not applicable.
Enclosed space ignition - Time equivalent	: Not applicable.
Enclosed space ignition - Deflagration density	: Not applicable.
Flame height	: Not applicable.
Flame duration	: Not applicable.

## Section 10. Stability and reactivity

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	: Reactive or incompatible with the following materials: acids
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on the likely routes of exposure

Inhalation	: No known significant effects or critical hazards.
Ingestion	: No known significant effects or critical hazards.
Skin contact	: Causes mild skin irritation.
Eye contact	: Causes serious eye irritation.

### Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: No specific data.
Ingestion	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness

## Section 11. Toxicological information

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
aluminium chloride, anhydrous methanol	LD50 Oral	Rat	3450 mg/kg	-
	LC50 Inhalation Gas.	Rat	145000 ppm	1 hours
	LC50 Inhalation Gas.	Rat	64000 ppm	4 hours
	LD50 Dermal	Rabbit	15800 mg/kg	-
	LD50 Oral	Rat	5600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
aluminium chloride, anhydrous  methanol	Skin - Severe irritant	Mouse	-	10 Percent	-
	Skin - Severe irritant	Pig	-	10 Percent	-
	Skin - Severe irritant	Rabbit	-	10 Percent	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	40 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-

#### Conclusion/Summary

**Skin** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.

**Eyes** : This product may irritate eyes upon contact.

**Respiratory** : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

#### Sensitization

Not available.

#### Potential chronic health effects

**General** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Eye contact** : No known significant effects or critical hazards.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

#### Chronic toxicity

Not available.

#### Carcinogenicity

Not available.



## Section 11. Toxicological information

### Mutagenicity

Not available.

### Teratogenicity

Not available.

### Reproductive toxicity

Not available.

### Specific target organ toxicity

Name	Category	Route of exposure	Target organs
methanol	Category A	Inhalation	Not determined

### Aspiration hazard

Not available.

### Numerical measures of toxicity

#### Acute toxicity estimates

Not available.

## Section 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

### Aquatic and terrestrial toxicity

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	Daphnia - Daphnia pulex - Adult	48 hours
	Acute LC50 610 µg/l Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Acute EC50 16.912 mg/l Marine water	Algae - Ulva pertusa	96 hours
	Acute LC50 2500000 µg/l Marine water	Crustaceans - Crangon crangon - Adult	48 hours
	Acute LC50 3289 to 4395 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 290 mg/l Fresh water	Fish - Danio rerio - Egg	96 hours
	Chronic NOEC 9.96 mg/l Marine water	Algae - Ulva pertusa	96 hours
methanol			

### Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
methanol	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
methanol	-0.77	<10	low

### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.



## Section 12. Ecological information

**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. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. 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

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
New Zealand Class	Not regulated.	-	-	-		-
ADG Class	Not regulated.	-	-	-		-
UN Class	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IATA Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-

PG\* : Packing group

## Section 15. Regulatory information

**New Zealand Inventory of Chemicals (NZIoC)** : All components are listed or exempted.

**HSNO Approval Number** : HSR002670

**HSNO Group Standard** : Surface Coatings and Colourants

**HSNO Classification** : 6.3 - SKIN IRRITATION - Category B  
6.4 - EYE IRRITATION - Category A (Irritant)

**Australia inventory (AICS)** : Not determined.

### 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

## Section 15. Regulatory information

Not listed.

### [Rotterdam Convention on Prior Informed Consent \(PIC\)](#)

Not listed.

### [UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

### [International lists](#)

#### [National inventory](#)

<a href="#">Australia</a>	: Not determined.
<a href="#">Canada</a>	: Not determined.
<a href="#">China</a>	: Not determined.
<a href="#">Europe</a>	: Not determined.
<a href="#">Japan</a>	: <b>Japan inventory (ENCS)</b> : Not determined. <b>Japan inventory (ISHL)</b> : Not determined.
<a href="#">Malaysia</a>	: Not determined.
<a href="#">Philippines</a>	: Not determined.
<a href="#">Republic of Korea</a>	: Not determined.
<a href="#">Taiwan</a>	: Not determined.
<a href="#">Turkey</a>	: Not determined.
<a href="#">United States</a>	: All components are listed or exempted.

## Section 16. Other information

### [History](#)

<a href="#">Date of printing</a>	: 9/15/2017
<a href="#">Date of issue/Date of revision</a>	: 9/15/2017
<a href="#">Date of previous issue</a>	: 9/13/2017
<a href="#">Version</a>	: 1.1

### [Key to abbreviations](#)

: ADG = Australian Dangerous Goods
: ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
: ATE = Acute Toxicity Estimate
: BCF = Bioconcentration Factor
: GHS = Globally Harmonized System of Classification and Labelling of Chemicals
: IATA = International Air Transport Association
: IBC = Intermediate Bulk Container
: IMDG = International Maritime Dangerous Goods
: LogPow = logarithm of the octanol/water partition coefficient
: MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
: RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
: UN = United Nations

<a href="#">References</a>	: Not available.
----------------------------	------------------

📌 Indicates information that has changed from previously issued version.

### [Notice to reader](#)

## **Section 16. Other information**

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.