

# Franklin International

## Material Safety Data Sheet

Product name : Titebond II Premium Wood Glue

### 1. Product and company identification

**CAS #** : mixture  
**Address** : Franklin International  
2020 Bruck Street  
Columbus OH 43207  
**Contact person** : Franklin Technical Services  
**Telephone** : (800) 877-4583  
**Emergency phone:** : Franklin Security  
(614) 445-1300  
**Reference number** : 5000  
**Product code** : 5006  
**Date of revision** : 9/23/2010.  
**Print date** : 11/16/2010.  
**Chemtrec (24 Hour)** : (800) 424 - 9300  
**Chemtrec International** : (703) 527 - 3887  
**Product use** : Wood Glue  
**Product type** : Crosslink Polyvinyl Acetate

### 2. Hazards identification

**Physical state** : Liquid.  
**Odor** : Faint odor.  
**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product.  
**Emergency overview** : MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
Slightly irritating to the eyes, skin and respiratory system. Avoid breathing vapor or mist. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.  
**Routes of entry** : Eye contact. Inhalation. Ingestion.  
**Potential acute health effects**  
**Inhalation** : Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation. Slightly irritating to the respiratory system.  
**Ingestion** : No known significant effects or critical hazards.  
**Skin** : Slightly irritating to the skin.  
**Eyes** : Slightly irritating to the eyes.  
**Potential chronic health effects**  
**Chronic effects** : 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.

## 2. Hazards identification

- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.
- Target organs** : May cause damage to the following organs: skin, eyes.  
Contains material which may cause damage to the following organs: mucous membranes, upper respiratory tract, eye, lens or cornea.

### Over-exposure signs/symptoms

**Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing

**Ingestion** : No specific data.

**Skin** : Adverse symptoms may include the following:  
irritation  
redness

**Eyes** : Adverse symptoms may include the following:  
irritation  
watering  
redness

**Medical conditions aggravated by over-exposure** : None known.

See toxicological information (section 11)

## 3. Composition/information on ingredients

### United States

<u>Name</u>	<u>CAS number</u>	<u>%</u>
aluminium chloride, anhydrous	7446-70-0	1 - 5

### Canada

<u>Name</u>	<u>CAS number</u>	<u>%</u>
aluminium chloride, anhydrous	7446-70-0	1 - 5

### Mexico

<u>Name</u>	<u>CAS number</u>	<u>UN number</u>	<u>%</u>	<u>IDLH</u>	<u>Classification</u>			
					<u>H</u>	<u>F</u>	<u>R</u>	<u>Special</u>
aluminium chloride, anhydrous	7446-70-0	Not available.	1 - 5	-	0	0	0	

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.

## 4. First aid measures

- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

## 4 . First aid measures

- 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.
- Notes to physician** : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5 . Fire-fighting measures

- Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : 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.

## 6 . Accidental release measures

- Personal precautions** : 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).
- Small spill** : Stop leak if without risk. Move containers from spill area. Dispose of via a licensed waste disposal contractor. Absorb with an inert material.
- 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. 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.

## 7 . Handling and storage

- 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. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : 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.

## 8 . Exposure controls/personal protection

### United States

Ingredient	Exposure limits
aluminium chloride, anhydrous	<b>OSHA PEL 1989 (United States, 3/1989). Notes: as Al</b> TWA: 2 mg/m <sup>3</sup> , (as Al) 8 hour(s). <b>NIOSH REL (United States, 6/2008). Notes: as Al</b> TWA: 2 mg/m <sup>3</sup> , (as Al) 10 hour(s).

### Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	List name	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	ppm	mg/m <sup>3</sup>	Other	Notations
aluminium chloride, anhydrous, as Al	AB 6/2008	-	2	-	-	-	-	-	-	-	
	BC 6/2008	-	2	-	-	-	-	-	-	-	[A]
aluminium chloride, anhydrous	ON 6/2008	-	2	-	-	-	-	-	-	-	
aluminium chloride, anhydrous, as Al	QC 6/2008	-	2	-	-	-	-	-	-	-	[A]

Notes: [A]as Al

### Mexico

Ingredient	Exposure limits
aluminium chloride, anhydrous	<b>NOM-010-STPS (Mexico, 9/2000).</b> LMPE-PPT: 2 mg/m <sup>3</sup> 8 hour(s).

Consult local authorities for acceptable exposure limits.

**Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

**Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

**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.

### Personal protection

**Respiratory** : 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.

**Hands** : 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.

**Eyes** : 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 or dusts.

**Skin** : 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.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9 . Physical and chemical properties

<b>Physical state</b>	: Liquid.
<b>Flash point</b>	: Closed cup: >93.3°C (>199.9°F) [Setaflash.]
<b>Color</b>	: Yellow.
<b>Odor</b>	: Faint odor.
<b>pH</b>	: 3
<b>Boiling/condensation point</b>	: 98.889°C (210°F)
<b>Relative density</b>	: 1.09
<b>Volatility</b>	: 52% (w/w)
<b>Evaporation rate</b>	: <1 (Butyl acetate. = 1)
<b>VOC (less water, less exempt solvents)</b>	: 5.5 g/l
<b>Dispersibility properties</b>	: Dispersible in the following materials: cold water and hot water.

## 10 . Stability and reactivity

<b>Chemical stability</b>	: The product is stable.
<b>Possibility of hazardous reactions</b>	: Hazardous reactions or instability may occur under certain conditions of storage or use.
<b>Hazardous polymerization</b>	: Hazardous polymerization may occur under certain conditions of storage or use.
<b>Conditions to avoid</b>	: No specific data.
<b>Materials to avoid</b>	: No specific data.
<b>Incompatibility</b>	: Reactive or incompatible with the following materials: acids and alkalis.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## 11 . Toxicological information

### United States

#### Acute toxicity

<b>Product/ingredient name</b>	<b>Result</b>	<b>Species</b>	<b>Dose</b>	<b>Exposure</b>
aluminium chloride, anhydrous	LD50 Dermal	Rabbit	>2 gm/kg	-
	LD50	Rat	333 mg/kg	-
	Intraperitoneal			
	LD50 Oral	Rat	3450 mg/kg	-
	LD50 Unreported	Rat	>315 mg/kg	-
	TDLo Dermal	Rabbit	10 pph	-

#### Chronic toxicity

No known significant effects or critical hazards.

#### Irritation/Corrosion

##### Conclusion/Summary

<b>Skin</b>	: Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
<b>Eyes</b>	: This product may irritate eyes upon contact.
<b>Respiratory</b>	: Inhalation of oil mist or vapors at elevated temperatures may cause respiratory irritation.

#### Sensitizer

No known significant effects or critical hazards.

#### Carcinogenicity

No known significant effects or critical hazards.

#### Mutagenicity

No known significant effects or critical hazards.

## 11 . Toxicological information

### Teratogenicity

No known significant effects or critical hazards.

### Reproductive toxicity

No known significant effects or critical hazards.

### Canada

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
aluminium chloride, anhydrous	LD50 Dermal	Rabbit	>2 gm/kg	-
	LD50	Rat	333 mg/kg	-
	Intraperitoneal			
	LD50 Oral	Rat	3450 mg/kg	-
	LD50 Unreported	Rat	>315 mg/kg	-
	TDL <sub>o</sub> Dermal	Rabbit	10 pph	-

### Chronic toxicity

No known significant effects or critical hazards.

### Irritation/Corrosion

#### 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.

### Sensitizer

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.

### Reproductive toxicity

No known significant effects or critical hazards.

### Mexico

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
aluminium chloride, anhydrous	LD50 Dermal	Rabbit	>2 gm/kg	-
	LD50	Rat	333 mg/kg	-
	Intraperitoneal			
	LD50 Oral	Rat	3450 mg/kg	-
	LD50 Unreported	Rat	>315 mg/kg	-
	TDL <sub>o</sub> Dermal	Rabbit	10 pph	-

### Chronic toxicity

No known significant effects or critical hazards.

### Irritation/Corrosion

#### 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.

### Sensitizer

## 11 . Toxicological information

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.

### Reproductive toxicity

No known significant effects or critical hazards.

## 12 . Ecological information

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

### United States

#### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
aluminium chloride, anhydrous	-	Acute EC50 3900 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - 12 hours	48 hours
	-	Acute EC50 2560 to 3060 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 1900 to 2040 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 1500 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute LC50 6930 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 6170 to 7200 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 6170 to 7250 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 36900 to 44400 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia sp. - <24 hours	48 hours
	-	Acute LC50 27100 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours
	-	Acute LC50 2300 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia sp.	48 hours
	-	Acute LC50 8600 to 11900 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss -	96 hours

## 12 . Ecological information

-	Acute LC50 7670 to 9610 ug/L Fresh water	5.52 cm - 33 g Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
-	Acute LC50 599 to 772 ug/L Fresh water	Fish - Atlantic salmon - Salmo salar - ALEVIN	96 hours
-	Acute LC50 584 to 676 ug/L Fresh water	Fish - Atlantic salmon - Salmo salar - ALEVIN	96 hours

### Biodegradability

No known significant effects or critical hazards.

### Canada

#### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
aluminium chloride, anhydrous	-	Acute EC50 3900 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - 12 hours	48 hours
	-	Acute EC50 2560 to 3060 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 1900 to 2040 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 1500 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute LC50 6930 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 6170 to 7250 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 6170 to 7200 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 36900 to 44400 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia sp. - <24 hours	48 hours
	-	Acute LC50 27100 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours
	-	Acute LC50 2300 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia sp.	48 hours
	-	Acute LC50 8600 to 11900 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 5.52 cm - 33 g	96 hours
	-	Acute LC50 7670 to 9610	Fish - Rainbow	96 hours



## 12 . Ecological information

	ug/L Fresh water	trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	
-	Acute LC50 599 to 772 ug/L Fresh water	Fish - Atlantic salmon - Salmo salar - ALEVIN	96 hours
-	Acute LC50 584 to 676 ug/L Fresh water	Fish - Atlantic salmon - Salmo salar - ALEVIN	96 hours

### Biodegradability

No known significant effects or critical hazards.

### Mexico

#### Aquatic ecotoxicity

Product/ingredient name	Test	Result	Species	Exposure
aluminium chloride, anhydrous	-	Acute EC50 3900 ug/L Fresh water	Daphnia - Water flea - Daphnia magna - 12 hours	48 hours
	-	Acute EC50 2560 to 3060 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 1900 to 2040 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute EC50 1500 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia dubia - Neonate - <24 hours	48 hours
	-	Acute LC50 6930 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 6170 to 7200 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 6170 to 7250 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	96 hours
	-	Acute LC50 36900 to 44400 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia sp. - <24 hours	48 hours
	-	Acute LC50 27100 ug/L Fresh water	Fish - Western mosquitofish - Gambusia affinis - Adult	96 hours
	-	Acute LC50 2300 ug/L Fresh water	Daphnia - Water flea - Ceriodaphnia sp.	48 hours
	-	Acute LC50 8600 to 11900 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss - 5.52 cm - 33 g	96 hours
	-	Acute LC50 7670 to 9610 ug/L Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss -	96 hours

## 12 . Ecological information

		Juvenile (Fledgling, Hatchling, Weanling) - 1 to 3 g	
-	Acute LC50 599 to 772 ug/L Fresh water	Fish - Atlantic salmon - Salmo salar - ALEVIN	96 hours
-	Acute LC50 584 to 676 ug/L Fresh water	Fish - Atlantic salmon - Salmo salar - ALEVIN	96 hours

### Biodegradability

No known significant effects or critical hazards.

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

## 13 . Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14 . Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
Mexico Classification	Not regulated.	-	-	-		-
ADR/RID Class	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG\* : Packing group

## 15 . Regulatory information

### United States

**HCS Classification** : Not regulated.

**U.S. Federal regulations** : TSCA 8(a) PAIR: 1-(2-butoxy-1-methylethoxy)propan-2-ol  
**United States inventory (TSCA 8b)**: All components are listed or exempted.

## 15 . Regulatory information

**SARA 302/304/311/312 extremely hazardous substances:** No products were found.

**SARA 302/304 emergency planning and notification:** No products were found.

**SARA 302/304/311/312 hazardous chemicals:** aluminium chloride, anhydrous

**SARA 311/312 MSDS distribution - chemical inventory - hazard identification:**  
aluminium chloride, anhydrous: reactive, Immediate (acute) health hazard, Delayed (chronic) health hazard

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**State regulations** :

- Massachusetts Spill:** None of the components are listed.
- Massachusetts Substances:** The following components are listed: ALUMINUM CHLORIDE
- New Jersey Hazardous Substances:** The following components are listed: ALUMINUM CHLORIDE
- New Jersey Spill:** None of the components are listed.
- New Jersey Toxic Catastrophe Prevention Act:** None of the components are listed.
- Pennsylvania RTK Hazardous Substances:** The following components are listed: ALUMINUM CHLORIDE (ALCL3)

### Canada

**WHMIS (Canada)** : Class E: Corrosive material

**Canadian lists** :

- CEPA Toxic substances:** None of the components are listed.
- Canadian ARET:** None of the components are listed.
- Canadian NPRI:** None of the components are listed.
- Alberta Designated Substances:** None of the components are listed.
- Ontario Designated Substances:** None of the components are listed.
- Quebec Designated Substances:** None of the components are listed.

**Canada inventory** : 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.

### Mexico

**Classification** :



### International regulations

**International lists** :

- Australia inventory (AICS):** Not determined.
- China inventory (IECSC):** Not determined.
- Japan inventory:** Not determined.
- Korea inventory:** Not determined.
- New Zealand Inventory of Chemicals (NZIoC):** Not determined.
- Philippines inventory (PICCS):** 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

## 16 . Other information

**Label requirements** : MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.  
**Hazardous Material Information System (U.S.A.)** :

Health	1
Flammability	1
Physical hazards	0

**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 MSDSs 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.

**Date of printing** : 11/16/2010.  
**Date of issue** : 9/23/2010.  
**Date of previous issue** : 5/5/2009.  
**Version** : 1

☑ 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.