



# Materials Safety Data Sheet

Perfect chem T020 MSDS

## Section 1

## PRODUCT AND COMPANY IDENTIFICATION

### Product Identification

Product name Perfect Chem T-020  
Synonyms Poly Aluminum Ferric chloride; PAFC  
Product Formula  $\text{AlFeCl}_6$   
General Characteristic Yellow liquid (varies with size)  
Product Use Water treatment chemical

CAS No. 1327-41-9

### Company Identification

Manufacturer Name Perfect Solution & Consultant Co., Ltd.  
Manufacturer Address 114/35 Passorn 33 Village, Klongsongtonnoon,  
Ladkrabang, Bangkok, (Thailand) 10520.

For non-emergency assistance, call: (+66) 867041133  
Website Address: <http://www.perfectconsultant.com/>

## Section 2

## COMPOSITION/ INFORMATION ON INGREDIENTS

Chemical Name Poly Aluminum Ferric Chloride  
Chemicals abstract registry number 1327-41-9  
Physical status Liquid  
Chemical formula  $\text{AlFeCl}_6$

Composition:  
Composition Percentage (by v.)%

a. $\text{AlCl}_3$	75%
b. $\text{FeCl}_3$	20%
c. Polymer	4%
d. $\text{H}_2\text{O}$	1%



### Section 3

### HAZARD IDENTIFICATION

Main health effects	No major effect on target organs has been reported	
3.1 Potential health effects		
Primer routes of entry:	Ingestion	
Inhalation:	No data	
Skin:	May cause irritation	
Contact with eye(s)	May cause irritation	
Ingestion	No data	
Chronic Exposure	No data	
3.2 Carcinogenicity		
Occupational Safety and Health Administration (OSHA)		None
National Toxicology Program (NTP)		None

### Section 4

### FIRST AID

A. Eye(s)	In case of contact with eyes, immediately flush eyes with plenty of water while holding eyelids open
B. Skin	In case of skin contact, remove contaminated clothing Wash affected area with mild soap and plenty of water (15-20 minutes at least) Get medical attention if necessary
C. Inhalation	If inhaled, move person to fresh air. Assist breathing if necessary. Consult a physician.
D. Ingestion	If swallowed, wash out mouth with plenty of water provided person is conscious. Consult a physician.



**Section 5**

**FIRE FIGHTING MEASURES**

- |  |               |
|--|---------------|
| A. Flash point:                        | None          |
| B. Flammable limits                    | None          |
| C. Auto-ignition:                      | None          |
| D. Unusual fire and explosion hazards: | None          |
| E. Hazardous combustion products:      | No data       |
| F. Fire extinguishing media:           | No applicable |
| G. Special firefighting procedures:    | No applicable |

**Section 6**

**ACCIDENTAL RELEASE MEASURES**

- A. Steps to be taken in case material is released or spilled:  
Use absorbent material and collect into container for disposal.
- B. Waste disposal methods: Disposal of waste according to Federal, State and Local Regulations.



Green Technology for WATER, AIR and WASTE

**Section 7**

**HANDLING AND STORAGE**

- |  |                  |
|--|------------------|
| A. Precaution to be taken in handling and storage: | Do not freeze    |
| B. Storage temperature:                            | Room temperature |
| C. Storage pressure:                               | No applicable    |



## Section 8

## EXPOSURE CONTROLS / PERSONAL PROTECTION

- |                            |  |
|----------------------------|--|
| A. Ventilation:            | Not required under normal use.                     |
| B. Eye(s) protection:      | Use safety glasses.                                |
| C. Skin protection:        | Clean body-covering clothing should be needed.     |
| D. Protective gloves:      | Wear chemical-resist gloves.                       |
| E. Respiratory protection: | Not required under normal use.                     |
| F. Guidelines:             | No guidelines are enacted by OSHA, ACGIH or NIOSH. |

ACGIH = American Conference of Governmental Industrial Hygienists  
NIOSH = National Institute for Occupational Safety and Health.

## Section 9

## PHYSICAL AND CHEMICAL PROPERTIES

- |   |  |
|---|--|
| A. Appearance and Physical State:             | Clear dual green yellow liquid<br>(varies with size) |
| B. Odor (threshold):                          | Sharp, pungent                                       |
| C. Specific Gravity (H <sub>2</sub> O) @ 4 °c | ~1.1g/cm <sup>3</sup>                                |
| D. Vapor Pressure (mm H):                     | ca.94 mm Hg  |
| E. Boiling Point:                             | 103 – 105 °c @ 760 mm Hg                             |
| F. Freezing Point/melting point:              | No applicable  |
| G. pH@ 25 °c                                  | ~3.0   |
| H. Solubility in Water:                       | Soluble  |
| I. Molecular weight:                          | No applicable  |
| J. Flash point:                               | Not Flammable  |
| K. Ignition Temperature:                      | Not applicable                                       |

## Section 10

## STABILITY AND REACTIVITY

- |  |                |
|--|----------------|
| A. Stability:                            | Stable         |
| B. Conditions to avoid:                  | Freezing       |
| C. Materials to avoid (Incompatibility): | No data        |
| D. Hazardous Decomposition Products:     | No data        |
| E. Hazardous Polymerization:             | Will not occur |



**Section 11**

**TOXICOLOGICAL INFORMATION**

A. Acute Oral Toxicity:	No data
B. Acute Inhalation Toxicity:	No data
C. Semi-acute Toxicity:	No data
D. Chronic Toxicity:	No data
E. Mutagenicity:	No data
F. Carcinogenicity:	No data
G. Other Toxicity:	No data

**Section 12**

**ECOLOGICAL INFORMATION**

A. Ecological Information:	No data
B. Chemical Fate Information:	No data



**Section 13**

**DISPOSAL CONSIDERATIONS**

A. Regulatory Information:	No data
B. Disposal Method:	No data

**Section 14**

**TRANSPORTATION INFORMATION**

A. U.S. Department of Transportation (D.O.T.) Information:	Not regulated
B. Canadian TDG Information:	Not regulated
C. International Air Transport Association (IATA) Regulation:	Not regulated
D. International Maritime Dangerous Goods (IMDG) Code:	Not regulated



**Section 15**

**REGULATORY INFORMATION**

U.S Regulations

TSCA: Components listed in Inventory

SARA: No data

TSCA = Toxic substance Control Act

SARA = Superfund Amendments and Reauthorization Act

CERCLA = Comprehensive Environment Response, Compensation, and Liability Act

**Section 16**

**OTHER INFORMATION**

Label Information: No data

European Risk and Safety Phrases: No data

European Symbols need: No data

Responsibility for use, storage, handling and disposal of the products described herein, whether alone or in combination with any other substance, is that of the purchaser and/or end user.

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