

公司地址：中國廣州經濟技術開發區永和經濟區華峰路2號

Factory Address: Huafeng Road 2#, Yonghe Economic Zone, Economic and Technological  
Development Zone, Guangzhou, China.

TEL: 0086-020-62868088

FAX: 0086-020-62868086

**GENERAL INFORMATION**

**物質安全手冊 MSDS**

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Property values are typical values. The data provided herein is for information purposes only. Each user of the material should perform their own tests to determine the suitability of the material for their particular application

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無鹵素覆蓋膜 Halogen Free Coverlay

Oct-12-2018

**1. 產品與公司資訊 Chemical Product and Company Information**

品名 Product Name: IF-FC  
 廠商 Manufacturer: 聯茂電子集團 ITEQ ELECTRON CORP.  
 地址 Factory Address: 中國廣州經濟技術開發區永和經濟區華峰路2號  
 Huafeng Road 2#,Yonghe Economic Zone, Guangzhou, China.  
 24小時緊急電話 Emergency Telephone (24 hr): 0086-020-62868055  
 一般安規資訊 General Safety Information: 0086-020-62868059

**2. 化學成分 Composition of Chemical**

名稱 Name:	重量百分比 Weight%	CAS.Number
聚醯亞胺膜 PI Film	11.65~19.19%	62929-02-6
離型紙 Release Paper	58.53~74.89%	—

No.	成分 Composition	重量百分比 Weight(%)	CAS.
1	紙 paper	70	65996-61-4
2	聚乙烯 polyethylene	30	9002-88-4

環氧樹脂接著劑 Epoxy Adhesive	13.46~22.28 %	—
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No.	成分 Composition	重量百分比 Weight(%)	CAS.
1	雙酚 A 環氧樹脂 Bisphenol-A type epoxy resin	43.13	61788-97-4
2	氫氧化鋁 ATH	17.12	21645-51-2
3	丁腈橡膠 Nitrile Butadiene Rubber	30.59	9003-18-3
4	二氨基二苯砜 DDS	2.54	80-08-0
5	雙氰胺 DICY	0.52	461-58-5
6	次膦酸鹽 Phosphinate	6.10	Not open

本產品不含 RoHS 所規定的禁用物質

This product does not contain reportable hazardous ingredients as defined by RoHS.

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**3. 物理及化學性質 Physical & Chemical Properties**

物質狀態 Physical State:	固態 Solid
形狀 Appearance:	膜狀 Film
顏色 Color:	黃色 Yellow
沸點 Boiling Point:	N/A
分解溫度 Melting Point:	N/A
閃火點 Flash Point:	N/A
溶解度 Water Solubility:	N/A
PH:	N/A
蒸汽壓 Vapor Pressure:	N/A
比重 Specific Gravity:	>1

**4. 穩定性及反應性 Stability & Reactivity**

穩定性：溫度 10°C 以下相對濕度 70% 的條件下保持穩定儲存三個月

Stability: Stable below 10°C, and relative humidity lower than 70% conditions of storage three months.

反應性：在溫度 30°C 以下相對濕度 70% 的搬用、儲存、生產條件下未參加反應

Reactivity: Not reactive under 30°C, and relative humidity lower than 70% conditions of handling, storage and processing.

應避免之條件：材料溫度高於 125°C 將會產生分解

Conditions to avoid: Material is attacked by oxidizing agents and will decompose as a function of time over 125°C.

應避免之物質：視潮濕狀況而定

Materials to avoid: Be affected with damp.

有害分解物：在一般生產條件下未有有害分解物產生。

Hazardous decomposition: None at normal processing temperatures.

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**5. 有害物質資訊 Toxic Properties**

急毒性 Acute Product Toxicity:	N/A
眼睛危害 Eye Irritation:	N/A
局部過敏 Partial irritation:	N/A
皮膚危害量 Dermal LD50:	N/A
吸入危害量 Oral LD50:	N/A
食入危害量 Inhalation LD50:	N/A

**6. 注意事項 Warning**

概要：生產過程中所產生的微塵可能對皮膚眼睛造成過敏、刺激或危害,由燃燒所帶來的煙塵同樣可能造成皮膚、眼睛、呼吸道產生危害。

Emergency overview: Dust from trimming, drilling and milling operations may cause irritation or injury to the eye due to mechanical action. Fire creates a dense smoke, which may cause eye, shin and respiratory tract irritation.

潛在健康危害 potential health effects:

眼睛：生產過程所產生的微塵可能對眼睛產生刺激或危害。

Eyes: Dust from trimming, drilling and milling operations may cause irritation or injury due to mechanical action.

皮膚：生產過程所產生的微塵可能造成皮膚過敏。

Skin: Powder from trimming, drilling and milling operations may cause skin irritation.

食入：無明顯症狀

Ingestion: Not acutely toxic.

吸入：微塵可能造成呼吸道感染。

Inhalation: Dust may be irritating to the respiratory tract.

致癌物質 Chroinc/Carcinogenicity::

NTP: N/A

OSHA: N/A

IARC: N/A

醫學制約：此產品無已知的健康影響

Medical Restrictions: There are no known human health effects aggravated to this product.

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**7. 急救措施 First Aid Instruction of Chemical Contact**

眼睛：清水沖洗 15 分鐘，如果症狀持續，立刻尋求醫療幫助

Eyes: For dust generated during trimming, drilling and milling operations, remove contact lenses at once. Immediately flush eyes with copious amounts of water for at least 15 minutes. If irritation persists, seek medical attention.

皮膚：用肥皂和涼水清洗淨皮膚上的殘留

Skin: Wash with soap and cold water to prevent copper dust from entering skin pores.

食入： N/A

Ingestion: Not probable

吸入：呼吸道感染請尋求醫療幫助

Inhalation: Dust - if breathing becomes impaired, seek medical attention.

**8. 滅火措施 Fire Fighting Measures**

消防：應具備完善的防護面具和防護服裝。

Firefighting: Approved pressure demand breathing apparatus and protective clothing should be used for all fires

滅火的媒介：噴水和泡沫，水是最佳的滅火媒介，一般不推薦二氧化碳和乾燥化學製品

Extinguishing Media: Water spray and foam. Water is the best extinguishing medium. Carbon dioxide and dry chemical are not generally recommended because their lack of cooling capacity may permit re-ignition.

有害燃燒物：甲醛、一氧化碳、濃煙和微塵

Hazardous Combustion Products: Formaldehyde, carbon monoxide, dense smoke and soot can be released while burning.

閃火點 Flash Point: N/A

最低燃燒極限 Lower Flammable Limit: N/A

最大燃燒極限 Upper Flammable Limit: N/A

燃燒條件：持續的火源

Conditions Of Flammability: Requires continuous flame source to ignite.

靜電：靜電對產品未有較大影響，但靜電對生產操作過程中所產生的微塵較為敏感

Static Discharge: The material is not sensitive to static discharge. Dust generated during trimming, drilling and milling operations may be sensitive to static discharge.

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**9. 淨化說明 Cleaning Instruction**

常規：注意！請勿在生產過程中長產生大量的微塵，否則採用相關回收設備避免該情況的產生  
General: Warning! During trimming, drilling and milling operations do not create dust cloud. Use collection methods such as vacuum and place into proper container for disposal or recovery.

**10. 處理辦法 Handling Instruction**

處理：採用完善的工業清潔設施，在生產操作過程中儘量減小微塵的吸入量，並充分透氣  
Handling: Use good industrial hygiene practices. During trimming, drilling and milling operations minimize inhalation of dusts and contact with skin and eyes. Provide adequate ventilation.  
儲存：應避開潮濕、熱源  
Stage: Store in a dry place away from moisture, excessive heat and sources.

**11. 生產安全事項 Operational Safety Instruction**

建議工作場所採用完善的除塵設備以及相關的防護措施避免與微塵的接觸並定期清除排氣罩，管道等，並注意適當的個人防護。

A continuous supply of fresh air to the milling operations workplace together with removal of process dust through exhaust systems is recommended. Processing dust may be a fire hazard; remove periodically from exhaust hoods, ductwork and other surfaces using appropriate personal protection.

個人防護 Personal Protection:

眼睛/臉部：配戴防護眼鏡和防護面具

Eye/Face: Wear safety glasses with side shields or chemical goggles during trimming, drilling and milling operations.

呼吸：如相關微塵不能及時控制，請配戴空氣呼吸器

Respiratory: When trimming, drilling and milling dusts are not adequately controlled, use respirator approved for protection from dust.

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**12. 環境影響 Environmental Effect**

常規：無相關重大的環境影響。

General: Not expected to present any significant ecological problems.

**13. 廢棄物處理方法 Dispersion Information**

有毒廢物 Hazardous Waste: N/A

廢物處理：請付合當地的法律法規，相關廢棄物請確認與歸類

Waste disposal: Recycling is encouraged, i. e. release paper portion of Coverlay. Landfill or incinerate in accordance with state and local requirements. Collected dusts from multi-step manufacturing operations should be tested to determine waste classification.

**14. 運輸資訊 Transformation Information**

危險級別 Dot Hazard Class: N/A

運輸名 Proper Shipping Name: N/A

標示號 Identification Number: N/A

**15. 法規 Regulation**

危險品法令(TSCA): 遵守 USEPA 有毒物質控制法案的化學物質存放要求。

TSCA Status: This product complies with the Chemical Substance Inventory requirements of the USEPA Toxic Substances Control Act.

車間危險品管理系統(WHMIS): 非受控產品。

WHMIS Classification: Not a controlled product.

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**16. 其他資料 Reservation**

製作單位 Prepared By: 技術部/品保部 Tech. and QA Department

對上述資料已力求準確,各項資料與資料僅供參考,使用者請依應用需求,自行判斷其可用性。  
The above information and recommendations are believed accurate and reliable. Additional safety precautions may be required as it is not possible to anticipate all conditions of use. ITEQ CORPORATION makes no warranty either express or implied including merchant ability and fitness.

客戶責任: 每個用戶應該清楚和理解該手冊資訊以及相關的危害通識標準(HCS).

User Responsibility: Each user should read and understand this information and applicable Hazard Communication Standards and Regulations.