

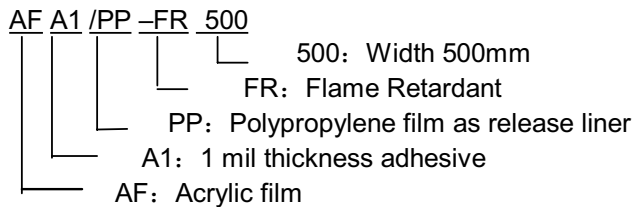
## AFA FR Flame Retardant & RoHS Adhesive Film of Acrylic

### 1. Description & Designation:

AFAFR product consists of PET release film coating adhesive clad release film. It includes various types according to different thickness of adhesive and release film, adhesive and release film utilized to meet the specific needs of customers.

Materials		Thickness	Supplier
Base film	Release PET film	1.0 mil (0.025mm) etc.	USA
Release Film	PP Film	2.0 mils (0.050mm) etc.	Toray of USA
	Release Paper	Cover PE in double sides and release on one side	Japan, Taiwan
Adhesive	Acrylic adhesive	Translucence, Thickness 0.5 2 .0 mils (0.0125 0 .050mm) etc.	USA, Japan

- Some special types appointed by customers can also be produced besides the common types listed in the above form.
- AFAFR product is identified by the following method:



### 2. Features & Applications:

AFA FR products are widely used in flexible printed circuit, polyimide film and copper foil as bond ply. It possesses following features:

- Meet the RoHS requirement and pass SGS certificate.
- High bond strength and excellent dimensional stability.
- Excellent electrical properties and low flow adhesive system.
- Good chemical and solvent resistance.
- UL 94V 0 approved and UL file No.E19233.

### 3. Package

- Standard roll: 50<sup>+0.25</sup> or 100<sup>+0.25</sup> square meters per roll, maximum 2 splices and minimum 20m distance during two splices.
- Standard width: 500mm or 24 inches width except the customer's special instruction within the maximum width 24 inches.
- Inner diameter core: 6 inches (152mm) or 3 inches (76mm), packed in carton and outside wrapped with PE film.

### 4. Storage:

- Storage time: 12 months since production date; please use after inspection again passed for the materials over the storage time.
- Recommended storage condition: temperature 68 86? (about room Temp. and cool no needed), maximum relative humidity 75%.



**Product Specification**

Issue Date: April, 2006

**AFA FR Flame Retardant & RoHS Adhesive Film of Acrylic  
Data Sheet of Performance**

Property To Be Tested	Test Method	Typical Product Value AFA1/PP FR	Typical Product Value AFA0.6/PP FR
* Peel strength, minimum, lb./in. width As received After sold float After thermal cycling	IPC TM 650 2.4.9 Method B Method D Method F	8.0 8.0 8.0	6.0 6.0 6.0
Dimensional stability, maximum, percentage,	IPC TM 650 2.2.4 Method B Method C	(MD/TD) +/-0. 20 (MD/TD) +/-0. 20	(MD/TD) +/-0. 20 (MD/TD) +/-0. 20
Adhesive Appearance	By eye	Translucence	Translucence
Adhesive Thickness	Q000463	0.025mm	0.015mm
Adhesive flow, maximum (squeeze out in inch),	IPC TM 650 2.3.17.1	3 mils/mil	1.8 mils/0.6mil
Flammability	IPC TM 650 2.3.8.1	UL94V 0	UL94V 0
Volatile content, maximum percentage,	IPC TM 650 2.3.37	2.0	2.0
* Solder float	IPC TM 650 2.4.13	550? 30seconds Pass	550? 30seconds Pass
* Chemical resistance, percentage	IPC TM 650 2.3.2	80	80
Dielectric strength, minimum, volts/mil	ASTM D 149	1000	1000
Insulation resistance, minimum, megohms,at ambient	IPC TM 650 2.6.3.2	10 <sup>4</sup>	10 <sup>4</sup>
*Moisture absorption, maximum, percent	IPC TM 650 2.6.2	5.5	5.5

**Mark:**

- (1) \* These data are applied to the relevant coverlay laminate with 1Oz/SF ED copper.
- (2) Recommended laminating cycle is 330 340? for 45 60 minutes at 215 285 psi.
- (3) Above data sheet are base on the typical products values. The final data for specific products supplied, please check the testing report attached with the shipment. These data are only for user's reference.  
The user should determine the suitability of JJFlex AFAFR materials for each application.
- (4) N/A: Not applicable.