

# Technical Data Sheet

## IdeaLINE Chemicals

Agfa offers following film processing chemicals for PCB applications.

- Idealine PDEV is the recommended developer for all the Idealine films for the best line edge quality : SPF - CKF – RPF – HPF – OPF – CDF – CPF2

A high optical maximum density (> 4.5) and a stable line width can be achieved. Continuous monitoring, accurate replenishment, regular maintenance guarantee the most consistent quality.

- Idealine PFIX is the recommended fixer for all the Idealine films : SPF - CKF – RPF – HPF – OPF – CDF – CPF2

- P-D Cleaner is a chemical for removing silver deposit on the developer tank and rack (user guidelines are available upon request).

### TYPICAL PROPERTIES

Product	Specific weight (20°C)	pH (25°C)
PDEV	1.270	10.8
PFIX	1.282	5.3

### APPLICATION PROCESS

Application	Line / Space $\mu\text{m}$	Film	Chemicals
Inspection	-	CDF – CPF2	PDEV – PFIX
Solder mask Legend, Drill	-	SPF - CKF – RPF – HPF	PDEV – PFIX
Inner / Outer	> 35	SPF - CKF – RPF – HPF	PDEV – PFIX
HDI / BGA	25 – 50 <25	RPF – HPF HPF	PDEV – PFIX
IC packaging	25 – 50 <25	RPF – HPF HPF	PDEV – PFIX
Touch screen Display	25 – 50 <25	RPF – HPF HPF	PDEV – PFIX

## Processing guidelines

See also technical data sheet of films

Recommended conditions and replenishment based on at least one tank turnover per week.

The replenishment rate is depending on the film consumption, average blackness and evaporation.

Drying temperature is depending on the processor model, developing time and relative humidity of the environment. The drying conditions also have an influence on the dimension of the image. Your Agfa representative will be pleased to give you more information.

	Dilution conc. + H2O	Temperature °C	Time seconds	Replenishment ml/m <sup>2</sup> @ 50% black (1;2)
PDEV	1+2	32 – 35	30 – 40	250 – 400
PFIX	1+4 (or 1+3)	30 – 33		250 – 500
Rinse		15 – 25		>3 L/min
Dry		35 – 55		

- (1) Replenishment of developer and fixer can be adjusted in function of the average blackness %.
- (2) With in line silver recovery and fixer recycling unit the fixer replenishment can be further reduced.

### Film processor cleaning and maintenance table

	Processor operational time					
	1 or 2 workshifts 5 days / week < 80 hrs / week		3 workshifts 5 days / week 80 – 120 hrs / week		3 workshifts 7 days / week > 120 hrs / week	
Film consumption # films / week	< 200	200 – 400	< 500	500 – 800	< 500	> 500

#### Frequency for underneath maintenance actions \*

1. Clean upper rolls and cross overs (quick clean)	1W	1W	2D	1D	2D	1D
2. Drain rinse water, add 30 ml chlorine bleach when no special anti algae unit is installed	1D	1D	1D	1D	1D	1D
3. Take out the racks and rinse them with water, cloth and brush	2W	2W	1W	1W	1W	1W
4. Drain chemicals and clean tanks with warm water, cloth and brush	2M	1M	1M	2W	2W	1W
5. Clean the rolls from dryer section with water	1M	1M	1M	2W	2W	2W
6. Chemical cleaning developer with PD-cleaner	6M	3M	2M	1M	2M	1M
7. Chemical cleaning fixer with Fixclean	1Y	1Y	1Y	6M	6M	3M
8. Change the filter cartridges from developer, fixer and water	1M	2W	2W	1W	2W	1W
9. Verify various functions : temperature, speed, pumps, recirculation, gear wheels, racks	1Y	1Y	1Y	6M	6M	3M

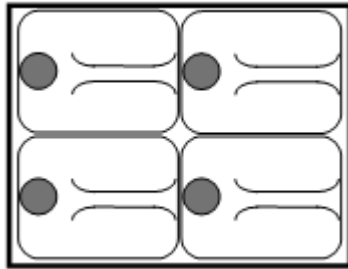
Estimated Cleaning time required to complete the above mentioned program

Daily	10'	10'	10'	10'	10'	10'
Weekly	30'	30'	45'	60' – 90'	60' – 90'	60' – 90'
Monthly	60' – 90'	90' – 120'	90' – 120'	120' – 180'	120' – 180'	120' – 180'

## PACKAGING



5 Liter jerrycan



4 x 5 L in a carton

## STORAGE AND SHELF LIFE

Product	Shelf life in months
PDEV	18
PFIX	36

Recommended storage conditions of chemicals		
Always keep the chemicals in a frost free and dry environment. Freezing can cause precipitation. Extended exposure to temperature above 35°C will reduce the shelf life.		
Temperature	°C	21
Relative humidity	%	50

## CERTIFICATIONS



Product development and manufacturing processes are executed according to the Quality Management System of Agfa, which is ISO9001 certified.

## ENVIRONMENT, HEALTH AND SAFETY

See the SDS for detailed information and warnings.

## CONTACT

You can contact us via e-mail at [industrialimaging@agfa.com](mailto:industrialimaging@agfa.com) or via [agfa.com/idealine](http://agfa.com/idealine).

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