# **CALBE CHEMIE**

## PRODUCT INFORMATION

### **RA-4 PAPER CARTRIDGES TYPE 48-49 Premium Edition**

RA-4 PAPER CARTRIDGES TYPE 48-49 Premium Edition enable easy, quick and safe refilling of chemicals in Frontier Minilabs.

Calbe Paper Cartridges Type 48-49 Premium Edition can be used universally in all Frontier machines – in machines from older series with standard process CP-48 SII/ CP-48HVII as well as in machines from newer series with fast processes CP-49E / CP-49HV / CP-49LR.

### **PRODUCT**

**RA-4 Paper Cartridge Type 48-49 Premium Edition** 

**REF 12925** 

Box with 2 Cartridges for 2 x 111 m<sup>2</sup> Colour Paper

### **CARTRIDGE CONTENT**

P1R Colour Developer 1.3 L concentrate for 5.0 L replenisher
P2R-A Bleach Fix Part A 1.3 L concentrate
P2R-B Bleach Fix Part B 1.3 L concentrate

for 3.9 L replenisher

### REPLENISHMENT RATES FOR MACHINES WITH CP-48SII / CP-48HVII

P1R Colour Developer 45 ml/m<sup>2</sup> P2R Bleach Fix 35 ml/m<sup>2</sup>

PSR Super Rinse\* 150 ml/m<sup>2</sup> for F-350, F-355, F-370, F-375

175 ml/m<sup>2</sup> for F-330 242 ml/m<sup>2</sup> for F-390

### REPLENISHMENT RATES FOR MACHINES WITH CP-49E / CP-49HV

P1R Colour Developer 45 ml/m<sup>2</sup> P2R Bleach Fix 35 ml/m<sup>2</sup> PSR Super Rinse\* 215 ml/m<sup>2</sup>

### REPLENISHMENT RATES FOR MACHINES WITH CP-49LR

P1R Colour Developer 40 ml/m² P2R Bleach Fix 31 ml/m² PSR Super Rinse\* 215 ml/m²

### **TEMPERATURES, TIMES, REPLENISHMENT RATES**

The main differences between the CP-48XX and CP-49XX process variants are temperatures and processing times.

Temperatures are ranging from 38.5°C (CP-48XX) to 43.0°C (CP-49XX), while processing times are in a scope from 45 seconds (CP-48XX) to 19 seconds (CP-49XX).

However, the replenishment rates are always identical: 45 ml/m<sup>2</sup> for P1R and 35 ml/m<sup>2</sup> for P2R - with the exception of process CP-49LR with replenishment rates of 40 ml/m<sup>2</sup> for P1R and 31 ml/m<sup>2</sup> for P2R.

<sup>\*</sup>Super Rinse is a separate article: FSC-100 tablets. REF 12712

# CALBE CHEMIE

### CONVERSION FROM CP-48SII, CP-48HVII, CP-49E, CP-49HV

Any temperatures adjusted can be adopted unchanged and the same applies to the replenishment rates P1R, P2R and PSR.

### **CONVERSION FROM CP-49LR**

Any temperatures adjusted can be adopted unchanged.

When docking of the first Calbe Paper Cartridge Type 48-49 Premium Edition, the replenishment rates should be set to 45 ml/m² for P1R and 31 ml/m² for P2R. PSR remains unchanged.

### **Working solutions**

Working solutions for Colour Developer and Bleach Fix are mixed by using Calbe RA-4 Start-Up Kits.

Start-Up Kit CD (P1) for 2 x 4,5 L REF 12560 Start-Up Kit BX (P2) for 2 x 4,5 L REF 12561

For the mixing of Super Rinse, 1 tablet of FSC-100 is dissolved in 5 litres of demineralised water.

### **OCCUPATIONAL SAFETY**

Handling of photographic chemicals is safe, if used properly and protective measures are followed. Hazard and precautionary information can be found on the label (H and P phrases, hazard symbol) and in the safety data sheet. Personal protective equipment should include safety goggles or face shield, protective gloves and a lab coat or apron.

#### **STORAGE**

RA-4 Paper Cartridges Type 48-49 Premium Edition in original packs should be stored dry, frost-proof and out of the reach of children. The maximum temperature range is between 5°C and 25°C. Crystallisation of individual ingredients may occur at low temperatures. Avoid direct heat sources. Storage temperatures between 10°C and 20°C are ideal.

### **SHELF LIFE**

Concentrates from RA-4 Paper Cartridges Type 48-49 Premium Edition in original packaging with unopened bottles have a shelf life of approx. 2 years.

#### **DISPOSAL**

Photographic chemicals - concentrates or used baths - must not be discharged into the public sewerage system. These chemicals must be discarded by commercial waste treatment companies, who properly treat and dispose of in accordance with legal regulations. Further information can be found in the safety data sheet.



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