Technical Data Sheet

20-N1



Rapid Process

N1 LTN-SP Film Developer & Replenisher: is a single part, high stability developer concentrate designed for standard and rapid process systems with low ultilisation. With a replenishment rate of 50± mls/roll 135-24 (100 ASA) this product can be used as a drop in replacement for similar chemical systems. The advantages of using N1- LTN-SP Developer & Replenisher is clear, less down time, clean working and improved stability.

N1 LTN-SP Film Developer & Replenisher:

- For processing low volumes of color negative film in all color film processors
- Stable with low to medium workload conditions
- Compatible with similar chemical systems
- Replenishment rate of 50mls/roll of 135/24

N2 RA Bleach Replenisher:

- This rapid process bleach is designed for minilabs with a 50 second or longer bleach time
- Replenishment rate of 5mls/roll of 135/24
- It has no acetic acid (no vinegar smell)

N3 RA Fixer Replenisher:

- Designed for a Rapid Access (RA) environment
- Companion product to N2-R Bleach Replenisher
- Easy to mix concentrate comes in a convenient 2L size for C41RA application

N4 XLF Stabiliser & Replenisher:

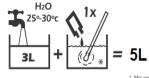
Works well with many systems of C-41 chemistry in a wide variety of minilab applications

N1	LTN-SP Developer Replenisher	4x5L	20N1-0116
N2	RA Bleach Replenisher	Variable	20N2-0335
N3	RA Fixer Replenisher	Variable	20N3-0208
N4	XLF Stabiliser Replenisher	2x200L	20N4-0625
N1-9	Colour Film Developer Starter	Variable	20ST-2101

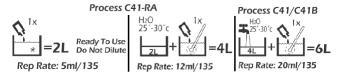


Replenisher Solutions

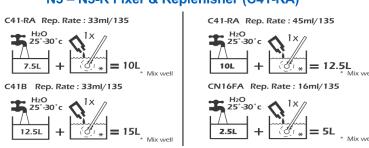
N1 LTN-SP Film Developer & Replenisher



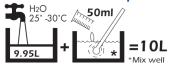
N2 - N2-R Bleach Replenisher



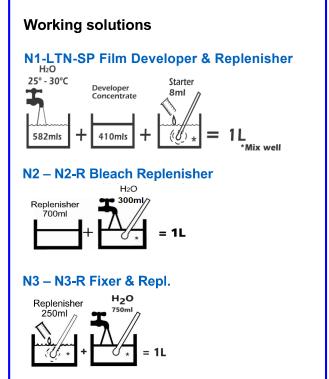
N3 – N3-R Fixer & Replenisher (C41-RA)



N4 - XLF Stabiliser Replenisher



* Mix Well



For N4 – N4-R Final Rinse,& Replenisher preparation of the working solution is same as the Replenisher.

PROCESS SPECIFICATIONS

*recommended starting point

Step	Processing Stage	Processing Time (Sec)	Recommended Temperature °C	Replenisher Rate (ml/roll 135-24)	Preparation of Working Solution (1L)
N1	N1-(CD) Developer & Replenisher	195	38.0 ± 0.3	50	(1) 582mls Water (2) 8mls Starter (3) 410mls Developer Conc
N2	N2-R Beach Replenisher	50	38.0 ± 3.0	Variable depending on Mix used	(1) 300ml Water (2) 700ml Replenisher
N3	N3-R Fixer & Repl. (C41-RA)	90	38.0 ± 3.0	Variable depending on Mix used	(1) 750ml Water (2) 250ml Replenisher
N4	N4-R (STB) Final Rinse & Repl.	60	38.0 ± 3.0	33	Same as Replenisher



CHEMISTRY SPECIFICATIONS

	N1 Dev & Repl		N2 N2-R Bleach Repl		N3 N3-R Fixer & Repl (C41-RA)		N4 N4-R Final Rinse & Repl	
	Seasoned	Repl	Seasoned	Repl	Seasoned	Repl	Seasoned	Repl
	Tank	Tank	Tank	Tank	Tank	Tank	Tank	Tank
рН	10.14 ±	10.40±	4.50±	3.75±	7.25±	7.45±	7.50±	7.40±
рп	0.10	0.05	0.20	0.05	0.20	0.20	0.20	0.20
Sp	1.073 ±	1.051±	1.132±	1.132±	1.109±	1.130±	1.005±	1.005±
Gr	0.010	0.010	0.020	0.006	0.010	0.010	0.005	0.005

STORAGE OF CHEMICALS:

- **Concentrates** -All of the processing system concentrates have a normal storage life of at least 12 months, when held in unopened containers under steady temperature conditions 13C°-18°C (56°F 66°F). However, storage temperature below 5°C (41.5°F) should be avoided as some crystallization may occur.
- Working Solutions and Replenishers Machine tank solutions should not be allowed to stand unused for more than one week, or the activity will be reduced by aerial oxidation. No more than one week's supply of any of the replenisher solutions should be made up at a time.
- Safe Use of Processing Chemicals -All chemicals should be kept out of reach of children. Refer to labels on the box and to the Material Safety Data Sheet for precautionary information. Protective clothing, including gloves and face/eye protection should always be worn when handling chemicals.

Contact our Service Plus Department or your local representative to determine which combination of chemicals is best suited for you

WARRANTY: Seller, Champion Photochemistry, expressly disclaims any and all warranties, express or implied, including any warranties of merchantability or fitness. Seller's sole obligation for defect is to replace the defective product. In no event shall seller have any liability for incidental or consequential damages.

Manufactured by:

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