EFFLUENT DATA



1 INTRODUCTION

This data sheet provides information to enable you to dispose of the ILFORD chemicals, recommended for use with the ILFOLAB MG2950 processor, in an environmentally safe way. In all cases, local regulations covering the disposal of waste must be consulted. Photographic processing products must not be discharged to local effluent systems without prior permission.

In the following tables, COD means chemical oxygen demand, g/l means grams per litre and ppm means parts per million.

2 ILFORD 2000RT DEVELOPER

ILFORD 2000RT developer diluted 1+4 generates waste containing the following typical constituents.

Constituent	Concentration (g/l)	
Hydroquinone and its oxidation products Carbonate ion Bromide ion COD	7 – 12 4 – 8 1·5 – 3·0 25	

The pH value for the above waste is 10.1 - 10.7.

3 ILFORD 2000RT FIXER

ILFORD 2000RT fixer diluted 1+4 generates waste containing the following typical consitiuents.

Constituent	Concentration (g/l)
Ammonium ion	20 - 40
Thiosulphate ion	80 - 110
Silver	0 - 6·0
Bromide ion	0 - 3·0
COD	62

The pH value for the above waste is $5 \cdot 1 - 5 \cdot 7$.

4 WASH WATER

During processing the water flow rate is fixed at 1.51/min and the only constituent to note is silver. All other chemicals carried over from the fixer tank are diluted to approximately 250 times normal dilution, and can be discounted.

Constituent	Concentration (g/l)	
Silver in wash water (and water overflow)	Typically	
of frequently used machine	<0·1	

5 ILFOLAB MG2950 CHEMISTRY DISPOSAL

The ILFOLAB MG2950 processor uses a replenished chemistry system. When working to maximum capacity the chemistry and wash water are replenished at the following rates:

Developer	108ml/min
Fixer	180ml/min
Wash	1.5I∕min

When the tank solutions are exhausted they are drained and replaced with fresh chemistry. Depending on use this will occur every 2 to 6 months. The typical constituents contained in waste from a machine during use, and when it is exhausted, are given in the tables below.

DEVELOPER

(Total tank volume = 15.75 litres)

Constituent	Tank waste composition (g/15·75 litres)	Overflow waste composition (g/108ml)
Hydroquinone and its oxidation products	190	1.3
Carbonate ion	126	0.9
Bromide ion	48	0.3
COD	394	3

The pH value for the above waste is 10.1 - 10.7.

FIXER

(Total tank volume = 15.75 litres)

Constituent	Tank waste composition (g/15·75 litres)	Overflow waste composition (g/180ml)
Ammonium ion Thiosulphate ion Silver ion Bromide ion	630 1733 95 47 976	7·2 19·8 1·1 0·5 11

The pH value for the above waste is $5 \cdot 1 - 5 \cdot 7$.

WASH WATER

(Total tank volume = 12.75 litres)

Constituent	Tank waste composition (g/12·75 litres)	Overflow waste composition (g/1.5 litres)
Ammonium ion	3.0	0·4
Silver ion	1.6	0·2

For more information consult the process manual or contact your local ILFORD Sales $\ensuremath{\mathsf{Office}}$.

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