

가 (8)

5. Cold

Cold (Pre-Bleaching) .

가

.

가

가

. 1l 6~8 gr 가

가

.

1) America

1 ° Tw

1

가

30

.

Cold

.

가

가

.

Cold ()

Alkali

.

Rohm

(B.P.100.224)

Pancrea 가 .

2) Clark (Cotton, 1932. 96 No.7. 28)

2 1
15Lbs 1
.

1. .

oz/sq YARD	3.50	3.04	3.06	3.11
LBS	64.40	72.40	69.90	67.00
LBS	62.90	80.70	86.20	80.00
CCl ₄ %	0.61	0.48	0.29	0.28
Alcohol %	0.64	0.32	0.18	0.22
%	5.34	1.81	0.92	0.33
%	0.93	0.43	0.25	0.08

2. .

		1	2	
oz/sq YARD	3.13	3.49	3.47	3.49
LBS	70.20	67.70	63.80	68.60
LBS	73.60	72.40	75.00	74.00
CCl ₄ %	0.66	0.43	0.11	0.11
Alcohol %	0.60	0.30	0.23	0.24
%	8.20	1.00	0.63	0.34
%	0.90	0.60	0.11	0.98

6. Combined

Combined

1) Zellstoff-Fabrik Waldhob

Alkali (

1g/l)

2) Pemanent White

Chloramine

가

Chloramine

Permanent White

Ever White

3) Mohr ()

30~40LBS

Pump

60~70

10

4) Osmotor

2~3

3/4

3

가 .

5) Ce-Es

2%

2% 가

가

1%

가

1

Florant VP Avirol AH Conc(Buthyl
Sulforicinoleate, Bohme F.C.) 가 가 .

6) I.G. (Korte)

Pectine Alkali
(PH3~4) Lignine
Alkali
1/2 가

7.

가 가

Chloramide (Chlorite) 가

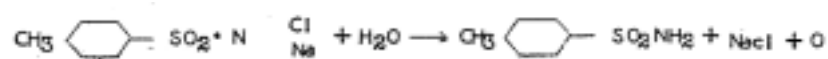
Chloramide

Chloramide

Chloramine T Dichloramine T .

kier 가

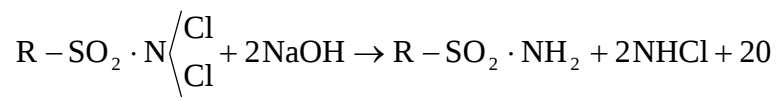
Chloramine T (Activin) P-toluen Sulfo Chloramine sodium



Chloramine TO ortho

Chloramine BX Meta CH₃ -COOH

Dichloramine T (Peractivin)



Chloramine T 가

.

가

Alkali

가 .

P-Toluen Sulfs Dichloramine

Alkali

.

1. ()

1~2 Chloramine

1000

3~6

1~2 .

2.

1~2 Dichloramine

10~20 가 (5%)

1000

70 가

.

3.

1,000kg

1~2kg

Dichloramine

1~2kg

가

가

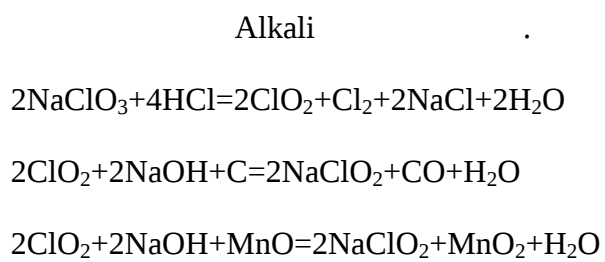
1~2

4~6

.

8.

1940 Matchson .
 1951 Neosilox
 가 Silbrite .



C MnO 가

20 40% 가 .

PH

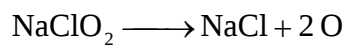
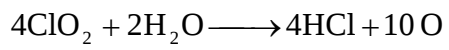
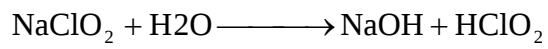
. Dubeau, Mac Mahon

Vincent PH , ClO₂ 가,

PH3

가

1)



가 . 가

, .
(NaCl)

2)

가 .

a) .

b) 가 .

HOECHST a)

HC b) HV .

HC HV Neosilox

가

3) Jigger

Jigger Mo Cover

Cover

Jigger

2

15~20g/l Neosilox Silbrite

6~8g/l HV

6~8g/l HC

6~8g/l Anion

PH=4 100%

(

가 .) Jigger Pipe Valve

가 . 2 Airing 65~70

5~6

2

가

가

Anion

가

Anion

(50%) 2.5~3%

가 .

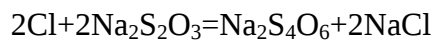
9.

가

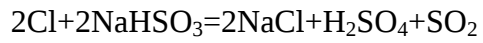
(Antichloring)

가

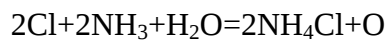
a) $\text{Na}_2\text{S}_2\text{O}_3$



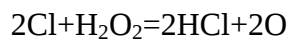
b) NaHSO_3



c) NH_3



d) H_2O_2



. Ammonia

가

.

Chloramin

.

Toluidine

.

1%

1%

1:10

20~30

.

10.

1)

가

Ever White

Permanent White

.

BaO_2 가

1912 가 1917 BaO₂ Na₃PO₃

H₂O₂ .

1817 Thenard

.

.

3~6%

. 10Vol 1l 10l

가 . 24Vol 가

.

. Ion 가

Alkali .

(Stabilizer) 가

(Activator) .

.

80~85 80

85 .

< 21> Vol %

		H ₂ O ₂ (%)
10Vol H ₂ O ₂	10	3.04
20Vol H ₂ O ₂	20	6.08
100Vol H ₂ O ₂	100	30.40

< 22>

PH	
6.8	1 10
7.1	2 50
7.9	2 10
8.9	1 10
9.9	2 25

1Vol 0.5Vol

< 23>

KIER	1899	0.3	2~3	3~6	H ₂ O ₂
KIER	1935	0.5~1%	80~100	6~10	30% H ₂ O ₂ (O.W.F.)
KIER	1947	0.2	100	5~6	H ₂ O ₂
	1939	1.4~1.6	100	1	H ₂ O ₂
		1.5~2.5%		2~3	(O.W.F.)

2) 가

가 가

. 1 가 5

가 .



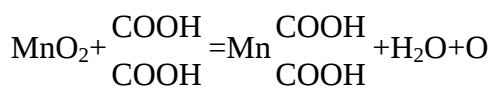
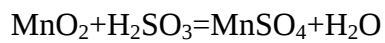
가 가 가

Alkali .



가

.



가

가

가 .

가

Oxy-cellulose

.

가 Alkali

Oxy Cellulose

.

Trotman · Thorp

316 KMnO_4

246 MgSO_4

3~4

.

11.

가

. Mono

-OOH 가

Ion

가

.

Du-Pont (B.P.550.490) PH10

(3Vol) .

2Vol H_2O_2

가

. ,

, Alkali 가 .

PH=8 가

PH=6~9

. PH

50 ° ~95 10~30 .

12. Ozon

Ozon 1890 Siemens Halske

. Ozon 24

3 14

가 .