
INDEX

The numbers shown in this index are Section numbers.

ANODIZED ALUMINUM, 110

BLEACHING, Pre-Dyed UltraColor 435

Chemicals for, B-113

CAMERA READY ART

Assembly of, 260

Adhesives, 263

Basic tools, 261

Crop marks, 265

Dummies, 266

Illustration board, 262

Overlays, 268

Protection of, 269

Registration marks, 265

Ruling, 264

CAMERA READY ART, elements of

Continuous tone art, 251

Halftone, 251

ordering of, 256

scaling of, 245

types of, 255

Halftone, reproduction methods

copy dot, 252

diffusion transfer process, 253

screened negative, 254

velox print, 254

Line art, 240

ordering of, 244

scaling of, 245

Line art, reproduction methods

diffusion transfer process, 242

line shots, 243

photostats, 241

velox prints, 243

Type

families, 213

groups, 212

styles, 211

terminology, 214

Type, ordering of

copy fitting, 231
specifying, 233
working up in size, 232

Typesetting

cut-out type, 225
phototypesetting, 222
raised type, 221
rub-off type, 224
transfer type, 223

CHEMICALS

Shelf life, B-152
Storage of, B-151
Useful life of, B-160

CHEMICALS for

Pre-Dyed Metalphoto Plus, B-100
Dyeing, B-140
Metalphoto, B-100
Metalphoto, image intensified, B-130
Polishing, B-120
Sealing, B-120
UltraColor, B-110

COLORING, BACKGROUND, Introduction to, 510

Dye-n-Seal

chemicals for B-146
mixing of, 531
pH of, 531
processing of, 532
Fade resistance, 511
Water soluble dyes
chemicals for, B-145
equipment requirements, 523
mixing of, 524
operating temperatures, 523
pH of, 524
processing of, 525

COLORING, SELECTIVE, free hand

Pantone pens, 570
Resist assisted, 590
Water soluble dyes, 570

COLORING, SELECTIVE, InstaColor

Introduction to, 550
Chemicals for, B-140
Coated plates, drying of, 556

Coated plates, shelf life of, 558
Coated plates, storage of, 558
Coating plates, conditions for, 552
Coating plates, methods of
 tank, 555, 556
 tray, 554, 556
 roll, 557

Exposure, 561
 calibration of, 560
 light source selection, 559
 registration marks, use of, 561

Processing of coated plates
 cleaning, 564
 developing, 562
 dyeing, 563

CONTINUOUS TONE ART, 251

CROP MARKS, use of, 265

DARKROOM REQUIREMENTS, 310

Cleanliness, 325
Safelights, 311
Safe lighting, test for, 311
Temperature, 312
Ventilation, 313

DENSITY, FILM, 276

DENSITOMETER, 276

DEVELOPING

Pre-Dyed Metalphoto Plus, 424, 425
Instacolor Resist, 562
Metalphoto, 414, 415
UltraColor, 434, 444

DYE, INSTACOLOR, See INSTACOLOR

DYE, WATER SOLUBLE, 520-525

Chemicals for, B-145
Equipment requirements, 523
Mixing of, 524
Operating temperatures, 523
pH of, 524
Processing of, 525
Use in free hand coloring, 570

DYE-N-SEAL, 530

Chemicals for, B-146
Mixing of, 531
pH of, 531
Processing of, 532

EQUIPMENT MAINTENANCE

Darkroom, 325
Exposure unit, A-101
Sealing tank, A-103
Tray and tank, A-104
Zip Processor, A-102

EXPOSURE CALIBRATION, for

Pre-Dyed Metalphoto Plus, 421
InstaColor, 560
Metalphoto, 411, 412
Clear UltraColor, 442
Pre-Dyed UltraColor, 432

EXPOSURE UNIT

Maintenance of, A-101

FADE RESISTANCE, 417, 511**FILM**

Density, 276
Emulsion side, 276
Handling of, 411
Size of, for
Pre-Dyed Metalphoto Plus, 421
InstaColor 561
Metalphoto, 411
Metalphoto, image intensified, 411
UltraColor, 433, 443
Systems, selection of, 275
Types
rapid access, 273
standard litho, 274

FILM, placement of on plate

Pre-Dyed Metalphoto Plus, 421
Instacolor, 561
Metalphoto, 411
Metalphoto, image intensified, 411
UltraColor, 433, 443

FILM, production, 270-277

Density, 276
Multiple images, 277
Rapid access, 273
Selection of, 275
Size of, 276
Standard litho, 274

FIXING

Pre-Dyed Metalphoto Plus plates, 424,

425

Metalphoto plates, 414, 415

HALFTONES, 251

HAND COLORING, 570

Pantone pens, 570

Resist assisted, 590

Water soluble dyes, 570

IMAGE INTENSIFICATION, 417

Chemicals for, B-130

Sealing after, 610, 620

INSTACOLOR, Introduction to, 550

Chemicals for, B-141, B-142, B-114

Coating plates, conditions for, 551, 552

Coating plates, methods of

tank, 555, 556

tray 554, 556

roll, 557

Exposure, 561

calibration of, 560

light source selection, 559

registration marks, use of, 561

Processing of coated plates

cleaning, 564

developing, 562

dyeing, 563

INSTACOLOR RESIST

Chemicals for, B-142

Coated plates, drying of, 556

Coated plates, shelf life of, 558

Coated plates, storage of, 558

Coating plates, conditions for, 552

Coating plates, methods of

tank, 555, 556

tray, 554, 556

roll, 557

Use of

*see COLORING, SELECTIVE, free
hand, or*

*COLORING, SELECTIVE, Insta-
Color*

**KODAK GRAY SCALE, use of to check
density, 276**

LIGHT SOURCE SELECTION

Metalphoto Plus, Pre-Dyed, 421

InstaColor, 559
Metalphoto, 411
UltraColor, Clear, 441
UllraColor, Pre-Dyed, 431

LINE ART, 240

LINE SHOTS, 243

LITHO FILM, STANDARD, 274

MAINTENANCE

Exposure unit, A-101
Sealing tank, A-103
Tray and tank, A-104
Zip Processor, A-102

MANUFACTURING PROCESSES

Metalphoto Plus, Pre-Dyed, 112
Metalphoto, 111
UltraColor, Clear, 114
UltraColor, Pre-Dyed, 113

MATTE FINISH PLATES

Polishing, special instruction, 650
Sealing of, 610, 620

METALPHOTO, Introduction to, 101

Chemicals for, B-100, B-130
Coloring, background, 510, 520, 530
Coloring, selective, 550, 570, 590
Darkroom requirements, 310
Description of, 101
Equipment maintenance, A-101, A-102,
Exposure
halftone exposure, 412
light source selection, 411
line shot exposure, 411
Image intensification, need for, 417
sealing of, 610, 620
Manufacture of, 111
Matte finish plates
polishing, special instruction, 650
sealing of, 610, 620
Plate storage, 324
Polishing of, 650
Pouches, how to open, reseal, return
unused plates to, 321
Processing, Metalphoto, 410
developing and fixing

Zip Processor, 414
tank and tray, 415
Processing requirements, 301
Processing tips, 710
Production film, 270
Sealing of, 610
Troubleshooting, Metalphoto, 810
dark spots, 813,
fog, 811
light spots, 814
weak images, 312, 812
yellow-tan stain, 815
Two-sided material, processing of, 416

OVERLAYS, use of, 268

pH for
Dye-N-Seal, 531, B-146
Water Soluble Background Dye, 524, B-145

PLATES, returning to pouch
Pre-Dyed Metalphoto Plus, 321
Metalphoto, 321
UltraColor, 322

PLATES, storage of, 324

PLATES, handling of, 411, 421, 433, 443

POLISHING, 650
Chemicals for, B-125

POST-SEALING TREATMENT, 610
Chemicals for, B-122

POUCHES
How to open, 321
Reseal, 323

PRE-DYED METALPHOTO PLUS,
Introduction to, 101, 112
Chemicals for, B-100
Darkroom requirements, 310
Description of, 101
Equipment maintenance, A-101, A-102, A-103, A-104
Exposure
halftone exposure, 422
light source selection, 421
line shot exposure, 421
Manufacture of, 112
Plate storage, 324

Polishing of, 650

Pouches, how to open, reseal, return
unused plates to, 321, 323

Processing, Pre-Dyed Metalphoto Plus,
420-425

developing and fixing

Zip Processor, 424

tank and tray, 425

Processing requirements, 301

Processing tips, 720

Production film for, 270

Sealing of, 610

Troubleshooting, Pre-Dyed Metalphoto
Plus, 830

dark spots, 833

drab or dirty color, 831

fading after sealing, 836

light spots, 834

staining after sealing, 837

uneven color, 835

weak image, 832, 312

PRE-IMAGING PREPARATION,

Introduction to, 201

PROCESSING, ZIP SYSTEM

Pre-Dyed Metalphoto Plus, 414

Metalphoto, 424

PROCESSING, TANK OR TRAY SYSTEM

Pre-Dyed Metalphoto Plus, 415

Metalphoto, 425

UltraColor, 434, 444

RAPID ACCESS FILM, 273

REGISTRATION MARKS, use of, 265

RESIST, INSTACOLOR, 553

Chemicals for, B-142

Coated plates, drying of, 556

Coated plates, shelf life of, 558

Coated plates, storage of, 558

Coating plates, conditions for, 551, 552

Coating plates, methods of

tank, 555, 556

tray, 554, 556

roll, 557

Uses of

*see COLORING, SELECTIVE, free
hand, or
COLORING, SELECTIVE, Insta-
Color*

SAFE LIGHTING, test for, 311

SAFELIGHTS, 311

SEALING, Introduction to, 601

Chemicals for, B-121

mixing of, 602

replenishment of, 630

useful life of, 640, B-160

Equipment maintenance, A-103

SEALING of

Pre-Dyed Metalphoto Plus plates, 610

Colored plates, 580

Matte finish plates, 610, 620

Metalphoto plates, 610

Metalphoto image intensified plates, 610,
620

UltraColor plates, 610

STANDARD LITHO FILM, 274

STOUFFER 21 STEP WEDGE, when to
use in exposure of

InstaColor, 561

Litho film, 274

Metalphoto, image intensified, 411, 417

UltraColor, 432, 442

TEMPERATURE REQUIREMENTS

Darkroom, 312

Storage area, B-151

**TEMPERATURE STANDARDS, CHEM-
ISTRY**

Developers for

InstaColor resist, 562

tank and tray processing, 415, 425

UltraColor processing, 434, 444

Zip processing, 414

Dyes

Dye-N-Seal, 531

Water Soluble Background Dye, 523

Fixer for

tank and tray processing, 415, 425

Zip processing, 414

Sealing baths, 602, B-121

TROUBLESHOOTING

Pre-Dyed Metalphoto Plus plates

color drab or dirty 831
color faded, 836
color uneven, 835
dark spots or streaks, 833
light spots or streaks, 834
spots, dark, 833
spots, light, 834
stains, 837
streaks, dark, 833
streaks, light, 834
weak image, 832

Background color, Dye-N-Seal

color inconsistent, 876
color uneven, 875

Background color, water soluble dye

color doesn't match sample, 874
color too dark, 873
color too pale, 872
color uneven, 870

Metalphoto plates

dark spots or streaks, 813
fog in background, 811
light spots or streaks, 814
spots, dark, 813
spots, light, 814
streaks, dark, 813
streaks, light, 814
weak image, 812
yellow-tan stain, 815

Selective color, InstaColor

color runs, 893
dye does not dissolve, 894
dye penetrates exposed area, 892
image doesn't develop, 895
plate does not accept dye, 891

UltraColor plates

color fades, 854
color not uniform, 851
development failure, 853
resist breakdown, 852

TWO-SIDED MATERIAL, 416

TYPE, 210-214

TYPESETTING, 220-225

ULTRACOLOR, CLEAR, Introduction to, 101, 114

Chemicals for, B-111, B-112, B-114

Darkroom requirements, 310

Description of, 101

Equipment maintenance, A-101, A-103, A-104

Exposure

calibration of, 442

light source selection, 441

procedure, 443

Manufacture of, 114

Plate storage, 324

Polishing of, 650

Pouches, how to open, reseal, return
unused plates to, 322, 323

Processing, Clear UltraColor, 440-446

cleaning, 446

development, 444

dyeing, 445

Processing tips, 730

Production film, 270

Sealing of, 610

ULTRACOLOR, PRE-DYED, Introduction to, 101, 113

Chemicals for, B-111, B-113, B-114

Darkroom requirements, 310

Description of, 101

Equipment maintenance, A-101, A-103, A-104

Exposure

calibration of, 432

light source selection, 431

procedure, 433

Manufacture of, 113

Plate storage, 324

Polishing of, 650

Pouches, how to open, reseal, return
unused plates to, 322, 323

Processing, Pre-Dyed UltraColor, 430-

436

bleaching, 435

cleaning, 436

development, 434

Processing tips, 730

Production film, 270

Sealing of, 610

ULTRACOLOR, TROUBLESHOOTING,
850

Color fades during sealing, 854

Color not uniform on Pre-Dyed, 851

Image won't develop. 853

Resist breaks down during bleaching, 852

VENTILATION, DARKROOM, 313

ZIP PROCESSOR, maintenance of, A-102

Operation of, for

Metalphoto, 414

Pre-Dyed Metalphoto Plus, 424