

Sun Chemical Online Ink Troubleshooting Guide

<https://inktsa.sunchemical.com/>



Mobile Friendly

Designed to provide quick solutions to problems when on press and is mobile friendly or print out relevant pages!



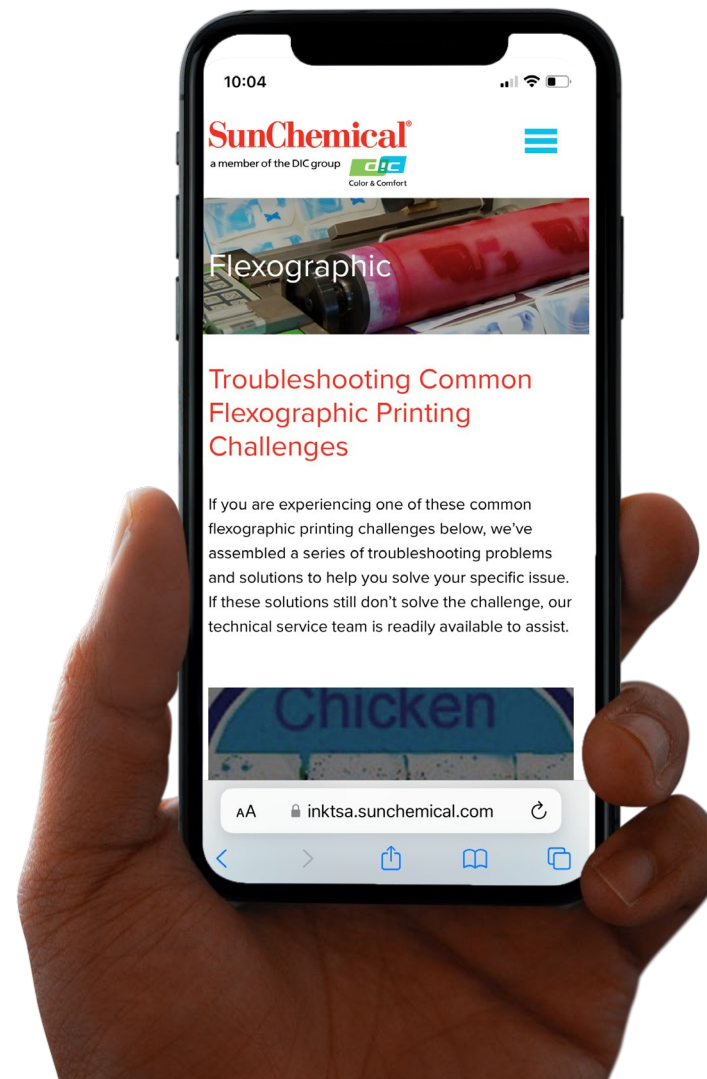
Available 24/7

Problems do not always happen between 9-5pm our online troubleshooting guide is always available online!



Easy to Use

Access to solutions at your fingertips and available in 6 languages!



Flexographic Ink Troubleshooting Guide



Sun Chemical Online -
[Flexographic Troubleshooting Guide](#)

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Adhesion



Problem:
Surface is not ink or lacquer receptive.

Solution:

Treat substrate if treatable, but do not over-treat; change to recommended ink type; and/or coating primer if possible.

Problem:

Ink is not drying properly.

Solution:

Add faster drying solvents and/or increase air and heat delivery. Thin inks if possible.

Problem:



Ink is brittle due to insufficient amount of plasticizer.

Solution:

Add small amount of plasticizer.

Problem:

Ink choice is improper for substrate.

Solution:

Reformulate ink for specific substrate.

Problem:

Ink viscosity is too high.

Solution:

Reduce ink viscosity to proper level.

Problem:

Web temperature is too low for substrate and ink.

Solution:

Increase web temperature to adequate level for substrate and ink.

Problem:

Re-worked ink has an out-of-balance pigment to vehicle ratio.

Solution:



Remake ink or refresh ink with fresh pigment and resin.

Blocking/Offset



Problem:

Ink is not drying properly.

Solution:

Add faster drying solvents and/or increase air delivery.

Problem:

Solvents are trapped.

Solution:

Add faster drying solvents and/or increase air and heat delivery. Also check for ink skinning.

Problem:



Web rewound is too warm.

Solution:

Reduce chill roll temperature.

Problem:

Rewind pressure on web is excessive.

Solution:

Reduce web tension.

Problem:

Ink or varnish are over-plasticized.

Solution:

Remake ink or varnish. Add anti-block agent.

Problem:

Ink or top lacquer is soft or has a low melting point.

Solution:

Remake ink or lacquer.

Problem:

Web temperature is too low.

Solution:



Increase web temperature.

Problem:

Moisture condensation appears on chill roll.

Solution:

Check and reset chill roll temperature above dew point.

Problem:

Ink has lost solubility creating a surface tack. Tacky inks are prone to blocking/offsetting.

Solution:

Add active (true) solvents for resin to remove surface tack.

Problem:

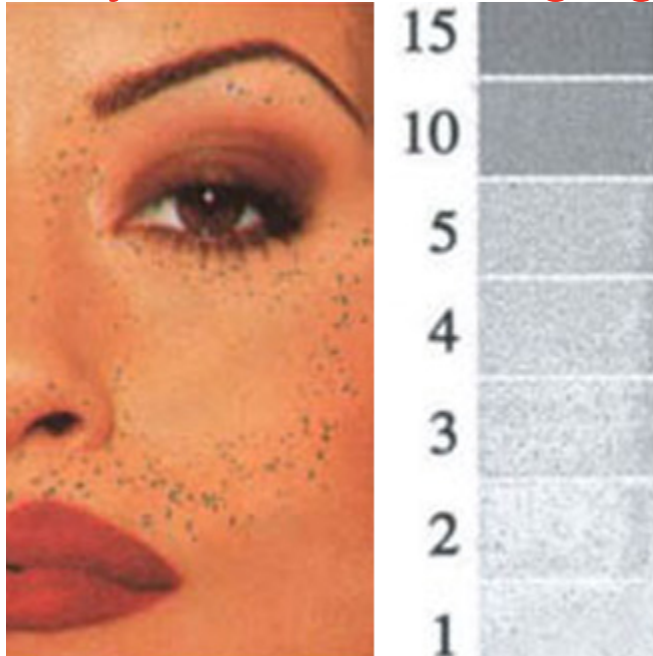
Blocking/Offsetting

Solution:

Add a wax compound or silicone (if applicable) to formula structure.
Wax/silicones will act as a release in the re-wind.



Dirty Print-Dot Bridging



Problem:

Anilox volume is too deep for dot size and an excessive amount of ink is metering to the plate.

Solution:

Reduce anilox volume or increase plate dot size.

Problem:

Ink is flooding plate dots due to loose ink metering or worn doctor blades.

Solution:

Check and adjust ink metering; check and replace doctor blade if indicated.

Problem:

Stray air is blowing on plate or anilox.



Solution:

Block stray air; balance dryers to eliminate.

Problem:

Plate impression or plate relief is excessive.

Solution:

Reset plate impression. Eliminate high spots if bridging is localized.

Problem:

Ink is drying too fast.

Solution:

Add slower drying solvents.

Problem:

Ink formula out-of-balance; affects film splitting/transfer.

Solution:

Check solvent blends for alcohol/ester balance. For clean printing, the resin structures must have the correct solvents.

Problem:

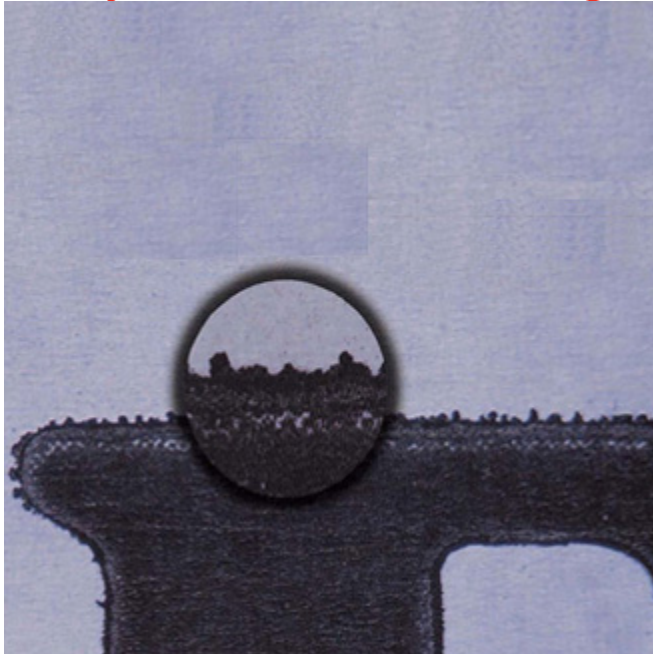
Ink too tacky.

Solution:

Incorporate harder resin.



Dirty Print-Feathering



Problem:

Impression between plate and substrate is excessive.

Solution:

Reset plate pressure to “kiss” impression.

Problem:

Water-based ink pH is too low.

Solution:

Reduce anilox volume.

Problem:

Ink is drying too fast.



Solution:

Check ink formulation; add slower drying solvents.

Problem:

Air hitting plates or anilox roll is excessive.

Solution:

Block stray air; balance dryers to eliminate “blown-down” on plates.

Problem:

Ink viscosity is too high.

Solution:

Reduce ink viscosity.

Problem:

Dust or lint is picked up from substrate.

Solution:

Check to be sure ink filters are working; filter ink.

Problem:

Ink formula out-of-balance; affects film splitting/transfer.

Solution:

Check solvent blends for alcohol/ester balance. For clean printing, the resin structures must have the correct solvents.



Problem:

Ink viscosities are uncontrolled. Wrong viscosity cups (out-of-range) for viscosities run. Cups need cleaning and calibrating.

Solution:

Record and control press-side viscosities. Check cups for accuracy and selection.

Dirty Print-Halos



Problem:

Pressure between plate and substrate is excessive.

Solution:

Reset plate pressure to “kiss” impression.

Problem:



Plate or sticky-back tape is too hard.

Solution:

Use plate with softer durometer; switch to a cushion sticky-back tape.

Problem:

Edges are cupped on plate.

Solution:

Check plate and replace if necessary.

Problem:

Plate cylinder is out of round, causing intermittent halos.

Solution:

Check run-out of plate cylinder and anilox roll; replace plate and/or anilox roll.



Fill-In



Problem:
Print impression is excessive.

Solution:
Reset plate pressure to “kiss” impression.

Problem:
Water-based ink pH is too low.

Solution:
Increase water-based ink pH.

Problem:
Ink is drying too fast.

Solution:



Add slower drying solvents to reduce tack. Tacky inks will usually show stringing from type edges.

Problem:

Plates are worn, uneven, cupped or poorly made.

Solution:

Check plates and replace if necessary.

Problem:

Ink viscosity is too high.

Solution:

Reduce ink viscosity.

Problem:

Plate relief height is incorrect.

Solution:

Adjust plate relief to correct height range.

Problem:

Foreign matter appears in ink.

Solution:

Filter or replace ink; eliminate source of contamination.

Problem:



Ink out of balance – pigment to resin, resin to solvent.

Solution:

Add resin and refresh ink; make sure the correct solvent is being used. Make sure ink is well mixed.

Ink Smearing/Bleeding



Problem:

First down ink is not fully dry.

Solution:

Increase drying speed of ink by:

1. Reducing ink viscosity
2. Reducing ink thickness by changing metering conditions
3. Adding faster drying solvent
4. Adjusting air balance and heat

Problem:



Second down ink, top lacquer or adhesive is too rich, causing first down ink to dissolve.

Solution:

Check second down material and reformulate for non-aggressive properties. Consult your Sun Chemical representative for a more resistant first down ink.

Problem:

Foreign object is dragging on wet print.

Solution:

Trace web and remove dragging object.

Problem:

Not wiping well; doctor blade issues.

Solution:

Reset doctor blades to correct contact angles. Replace blades. Check chamber balance – side to side – in and out.



Mottled Print



Problem:

Substrate is poor or marginally treated.

Solution:

Check and adjust treatment level or change stocks.

Problem:

Surface of substrate has holes.

Solution:

Check substrate and reduce ink viscosity for better wetting. Consult your substrate supplier.

Problem:



Surface tension of ink is not low enough to properly flow out on substrate
(Seen mostly in aqueous inks).

Solution:

Reduce surface tension of inks by adding wetting agents.

Problem:

Impression between plate and substrate is too low.

Solution:

Increase plate impression and check print appearance.

Problem:

Sticky-back tape is too soft.

Solution:

Use hard tape for solid print areas when possible.

Problem:

Ink viscosity is too low.

Solution:

Increase ink viscosity.

Problem:

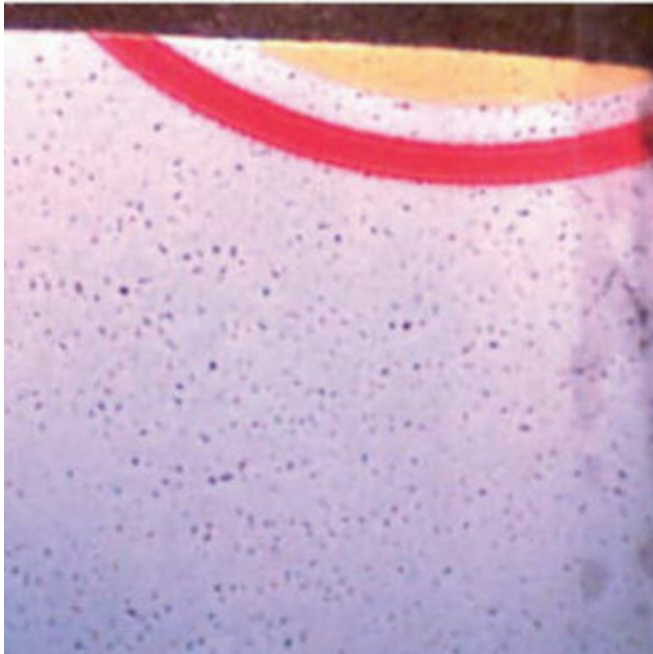
Ink out of balance/contaminated.

Solution:



Increase resin solids/refresh ink. Strain ink or remake.

Pinholes



Problem:

Substrate is poor or marginally treated.

Solution:

Check and adjust treatment level or change stocks.

Problem:

Surface of substrate has holes.

Solution:

Check substrate and reduce ink viscosity for better wetting. Consult your substrate supplier.

Problem:



Surface tension of ink is not low enough to properly flow out on substrate.
(Seen mostly in aqueous inks.)

Solution:

Reduce surface tension of inks by adding wetting agents.

Problem:

Impression between plate and substrate is too low.

Solution:

Increase plate impression and check print appearance.

Problem:

Sticky-back tape is too soft.

Solution:

Use hard tape for solid print areas when possible.

Problem:

Ink is drying too fast.

Solution:

Add slower drying solvents.

Problem:

Dried ink, dirt or rust is on impression cylinder.

Solution:



Check and clean cylinder/drum.

Problem:

Use of defoamer in water inks is excessive.

Solution:

Add fresh ink or check formula and reformulate ink.

Problem:

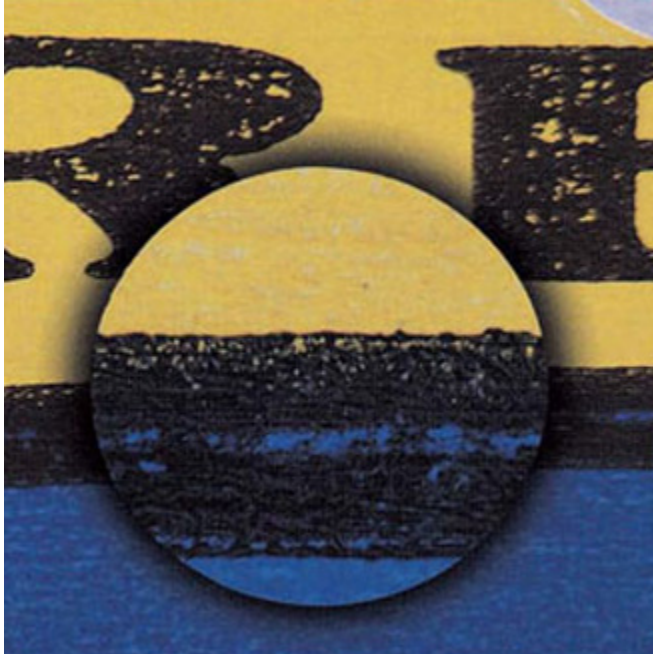
Anilox worn.

Solution:

Replace or mechanically clean.



Poor Trapping



Problem:

First down color is not fully dry.

Solution:

Increase drying speed of first down ink by:

1. Reducing ink viscosity
2. Reducing ink film thickness by using shallower anilox volume
3. Adding faster drying solvents
4. Increasing dryer temperature and air velocity in dryer

Problem:

Second down ink is drying too fast and not printing.

Solution:

Check and eliminate air blowing on plates; add slower drying solvents.

Problem:

Wax or slip aid in first down ink is excessive.

Solution:

Check formula and remake ink if necessary.

Problem:

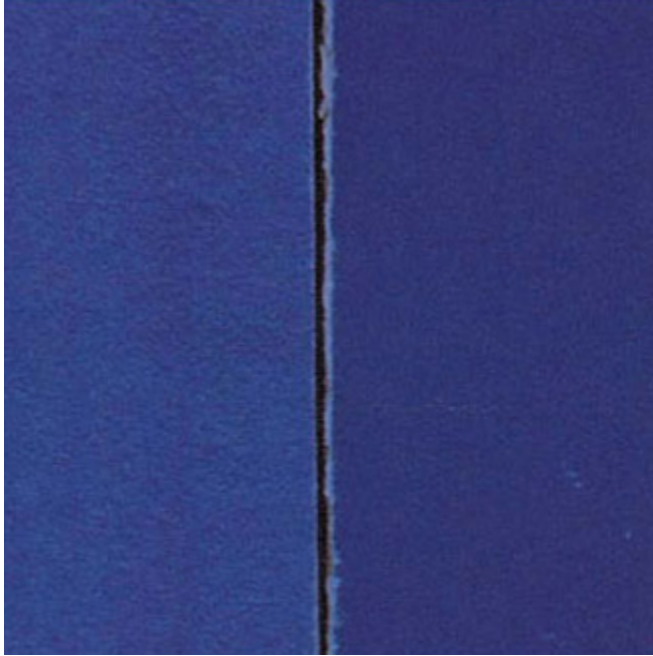
Second down ink is not compatible with first down ink.

Solution:

Consult your Sun Chemical representative for proper ink type.



Weak Print Color



Problem:

Ink viscosity is too low.

Solution:

Increase ink viscosity.

Problem:

Anilox volume is too low.

Solution:

Increase anilox to proper volume.

Problem:

Sticky-back tape is too soft.

Solution:



Use harder tape for line work to achieve good ink transfer.

Problem:

Ink is over-extended.

Solution:

Check formula and add fresh ink.

Problem:

Ink formulation is too weak.

Solution:

Check raw ink formula for proper strength; check to see if ink is re-work and has proper strength.

Problem:

Substrate is not receptive to ink.

Solution:

Check substrate surface; check for proper film treatment.

Problem:

Ink is drying on plates or anilox.

Solution:

Eliminate any excess air blowing on plates and anilox; add slower drying solvents.



Problem:

Ink is kicking-out or settling.

Solution:

Make sure ink is properly mixed, with no settling on bottom or signs of ink separation.

Problem:

Ink is aged, used, and/or worn out.

Solution:

Refresh ink.

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The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.

6-2021



Paper Packaging Troubleshooting Guide



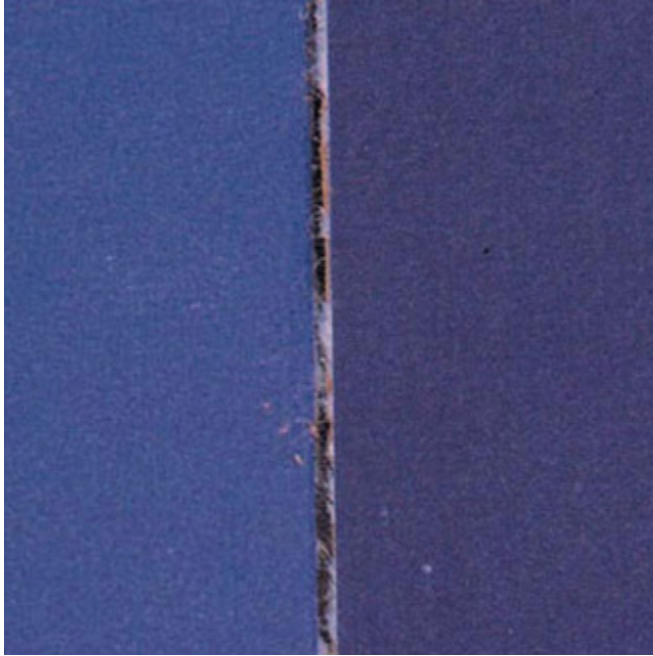
Sun Chemical Online – [Paper Packaging Troubleshooting Guide](#)

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Dark or Dirty Print Color



Problem:

Ink viscosity is too high.

Solution:

Lower ink viscosity.

Problem:

Ink colorant concentration too high for press or job configuration.

Solution:

Add extender to the ink. Reduce ink film thickness.

Problem:

Ink film too thick.



Solution:

Reduce ink film thickness by lowering ink viscosity, increasing ink metering effectiveness, decreasing machine speed or decreasing anilox volume.

Problem:

Ink contamination from prior color.

Solution:

Thoroughly clean press station and replace ink.

Problem:

Ink formulation is incorrect.

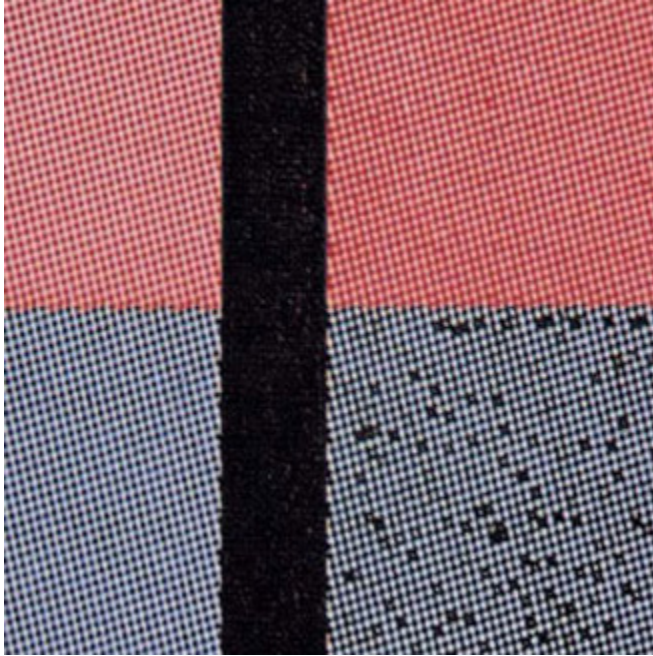
Solution:

Consult your Sun Chemical representative.

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Dirty Print – Dot Bridging



Problem:

Anilox volume is too high.

Solution:

Reduce anilox volume.

Problem:

Ratio of dot size (print size) to anilox cell count is inadequate.

Solution:

Revise art, screen and plates for press capabilities.

Problem:

Plate impression is excessive.



Solution:

Reduce plate to substrate impression.

Problem:

Anilox to plate pressure is excessive.

Solution:

Adjust to reduce anilox impression. Check plate level.

Problem:

Paper dust from board or pressroom collects in the ink and sticks to the plate.

Solution:

Clean press, plates and environment. Ensure clean sharp slitting and sheeting.

Problem:

Ink film is too thick for plate screen.

Solution:

Reduce ink film thickness by lowering ink viscosity, increasing ink metering or decreasing anilox volume.

Problem:

Ink is drying too fast.



Solution:

Add slow solvent; increase machine speed.

Problem:

Printing plate is too soft.

Solution:

Use plates with a harder durometer.

Problem:

Worn plates

Solution:

Replace plates.

Problem:

Ink pH is too low.

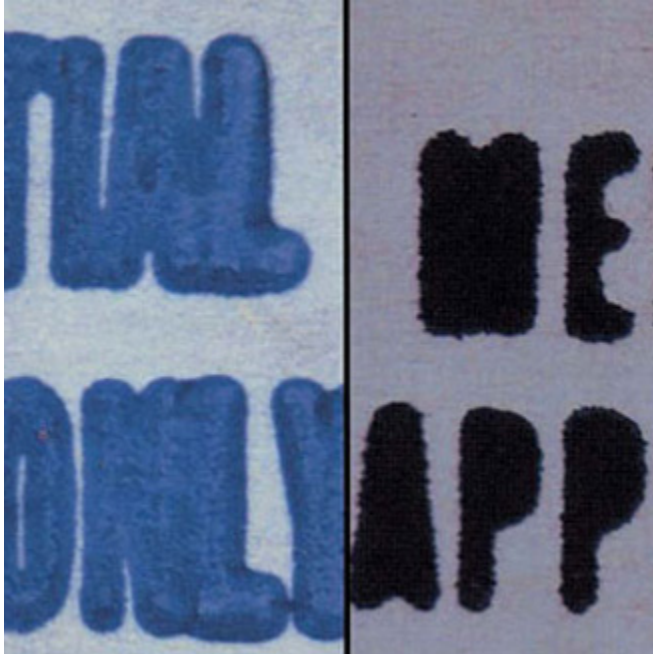
Solution:

Check and adjust pH (non-pH stable inks only).

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Dirty Print – Fill In



Problem:
Plate impression is excessive.

Solution:
Reduce plate to substrate impression.

Problem:
Plates are uneven, worn, cupped, glazed or mismatched (slugged).

Solution:
Level, build up, clean, replace plates or entire mount.

Problem:
Printing plate is too soft.



Solution:

Use a higher durometer plate.

Problem:

Ink film applications are uneven due to press or plates that are not level.

Solution:

Adjust ink metering, print and anilox impressions, and roll parallel. Or replace plates.

Problem:

Ink film too thick for plate and art design.

Solution:

Reduce ink film thickness by lowering ink viscosity, increasing ink metering effectiveness or decreasing anilox volume.

Problem:

Positive or reverse type are too small for ink film thickness/metering.

Solution:

Revise art, screens and plates for press capabilities.

Problem:

Paper dust collects in the press or ink and sticks to the plate.



Solution:

Clean press, plates and environment. Ensure clean, sharp slitting and sheeting.

Problem:

Ink drying too fast.

Solution:

Add glycol or increase press speed.

Problem:

Ink pH is too low.

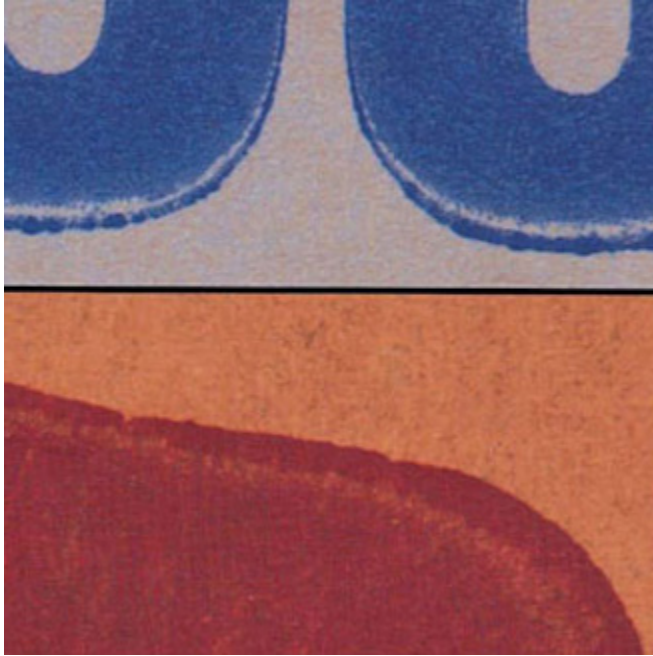
Solution:

Check and adjust pH (non-pH stable inks only).

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Dirty Print – Halos



Problem:
Entire image is halos.

Solution:

Eliminate entire image halos by:

1. Reducing plate to substrate impression.
2. Reducing anilox impression or checking plate level and mounting.

Problem:

Leading edge halos only.

Solution:

Eliminate leading edge halos by:

1. Reducing anilox pressure to plate.
2. Checking level and mounting.



Problem:

Plate wrap has distortion.

Solution:

Remount plate to fit cylinder tightly.

Problem:

Everything halos

1. Plates are uneven, worn, cupped, glazed or mismatched (slugged).
2. Ink film is too thick.
3. Printing plate is too hard.
4. Ink film applications are uneven due to machine or uneven plates.

Solution:

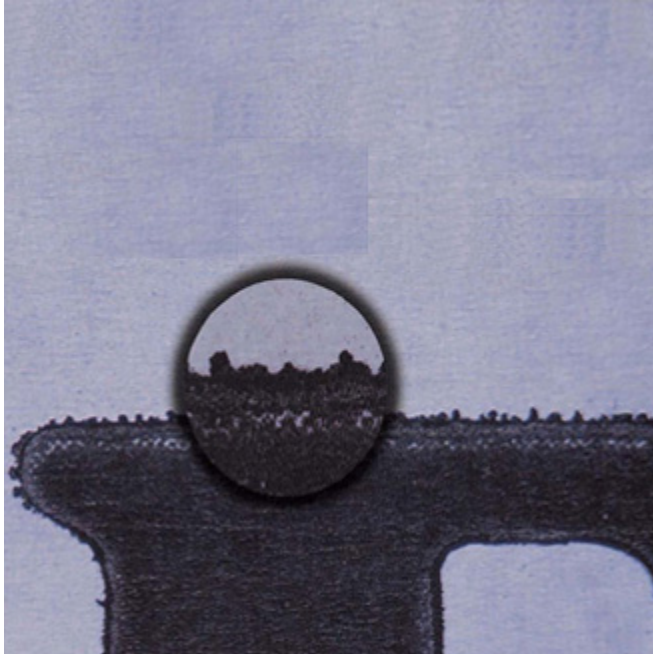
Eliminate all halos by:

1. Leveling, building up, cleaning or replacing plates or entire mount.
2. Reducing ink film thickness by lowering viscosity, increasing ink metering effectiveness, or decreasing anilox volume.
3. Using plates with a softer durometer.
4. Adjusting ink metering, print and anilox impression, and roll parallel. Or replacing plates.

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Dirty Print – Feathering



Problem:
Excessive plate impression.

Solution:
Reduce plate to substrate impression.

Problem:
Printing plate too hard.

Solution:
Use plates with a softer durometer.

Problem:
Anilox to plate pressure is excessive.



Solution:

Adjust to reduce anilox impression. Check plate level.

Problem:

Plates are not level, worn, cupped, glazed or mismatched.

Solution:

Level, build up, clean or replace entire mount.

Problem:

Ink film is too thick.

Solution:

Reduce ink film thickness by lowering viscosity, increasing ink metering effectiveness or by decreasing anilox volume.

Problem:

Ink is drying too fast.

Solution:

Add glycol to slow drying or increase machine speed.

Problem:

Ink pH is too low.

Solution:

Check and adjust pH.



Problem:

Paper dust collects in ink or sticks to plate.

Solution:

Clean press, plates and environment. Ensure clean sharp slitting and sheeting.

Problem:

Ink film applications are uneven due to press or uneven plates.

Solution:

Adjust ink metering, print and anilox impressions, and roll parallel, or replace plates.

Problem:

Ink pH is too low.

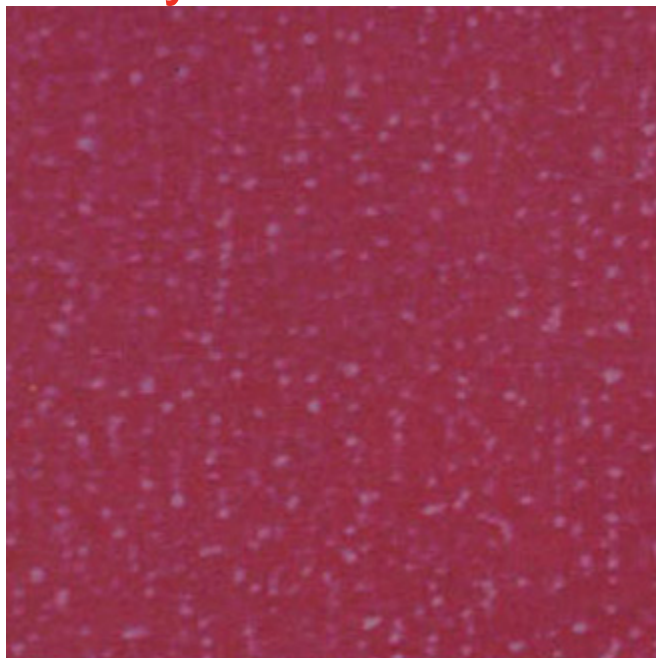
Solution:

Check and adjust pH (non-pH stable inks only).

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Fisheyes



Problem:

Excessive defoamer added to the ink.

Solution:

Replace ink or add fresh ink without defoamer added.

Problem:

The defoamer added to the ink is incompatible.

Solution:

Replace ink or add fresh ink without defoamer added. Consult the local Sun Chemical representative for recommended products or additives.

Problem:

Ink has excessive foam or microfoam.

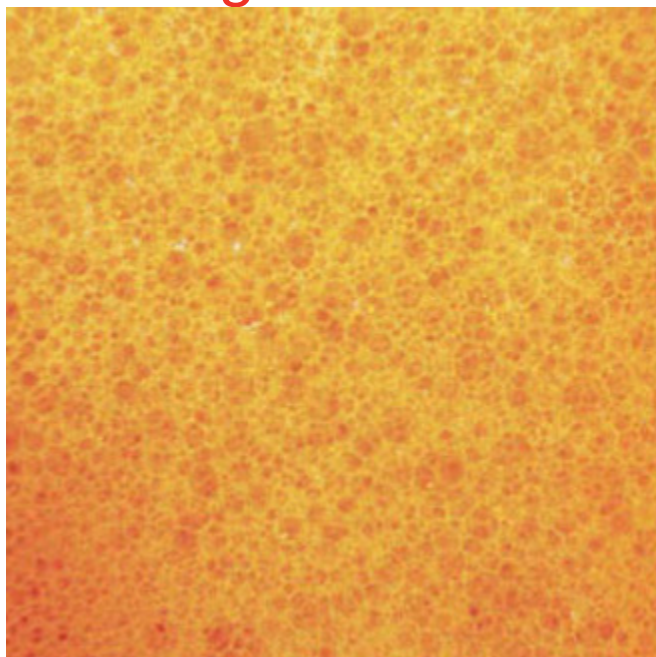


Solution:

Eliminate foam or replace ink.

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.

Foaming



Problem:

Too much air being introduced into ink.

Solution:

Check for leaking pump seals or hoses on the suction side; repair as required.

Problem:

Pump pressure is excessive, causing splashing and aeration.



Solution:

Reduce pump pressure to minimum required (use pump volume, not pressure).

Problem:

Agitation of ink is causing excessive splashing and aeration.

Solution:

Reduce pump or mixer speed to the minimum required and keep ink return lines submerged.

Problem:

Poor sealing of doctor blade assembly.

Solution:

Replace blades frequently. Adjust chamber for wipe and sealing. Adjust pumping to keep chamber full.

Problem:

Too much water is being added to the ink.

Solution:

Raise ink viscosity by adding fresh ink.

Problem:

Ink viscosity is too high.



Solution:

Lower ink viscosity to release trapped foam.

Problem:

Ink formulation is incorrect.

Solution:

Consult your local Sun Chemical representative.

Problem:

Excessive foam

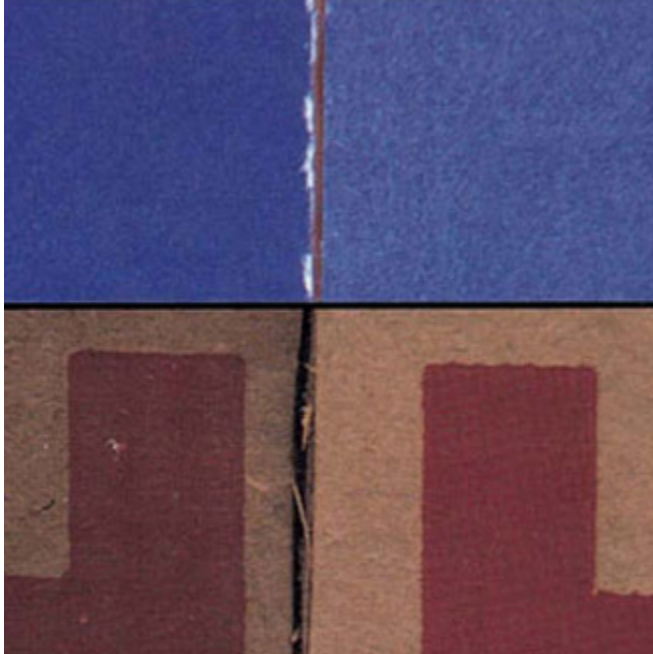
Solution:

Spray a mist of Sun Chemical defoamer over the surface of the bubbles to break foam formation.

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Inconsistent Print Color



Problem:

Color inconsistencies appear during press runs due to changes in viscosity

1. Changes in substrate
2. Additions to ink in press
3. Foam

Solution:

Optimize color consistency by monitoring and controlling viscosity.

1. Control substrate or adjust ink for stock.
2. Monitor, measure and control all materials added to ink at press side.
3. Add defoamer properly.

Problem:

Color inconsistencies appear between press runs due to changes in ink, substrate, run configurations, press conditions, suppliers, machine settings or speed.



Solution:

Optimize color consistency by monitoring, documenting and controlling critical variables of the printing process on each order, thereby allowing reproducible print performance.

Problem:

Color inconsistencies appear between different press stations:

1. Differences in applied ink film thickness between print stations.
2. Changes in ink, press conditions, plates, ink suppliers, operator measurement or machine settings.

Solution:

Optimize color consistency by:

1. Adjusting the formulation ink to correspond to various station configurations, such as: anilox volume, cell count and condition, metering types, pressures and conditions.
 2. Measuring, documenting and understanding differences, and ensuring that proper materials and procedures are used to minimize the effect of changes in the process.
-

Problem:

Color inconsistencies appear during press runs due to changes in pH.

Solution:

Optimize color consistency by monitoring and controlling ink pH (non-pH stable inks only).

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Ink Smearing – Tracking



Problem:

Ink is not dry due to ink film thickness or formulation

Solution:

Increase drying speed of the ink by:

1. Reducing ink viscosity.
2. Reducing ink film with better metering.
3. Changing ink formulation for faster drying.
4. Decreasing machine speed.
5. Decreasing anilox volume.

Problem:

Ink film applications are uneven on substrate.



Solution:

Adjust ink metering, print and anilox impressions, as well as roll parallel. Also, check plate level.

Problem:

Ink is not drying due to high hold out of substrate.

Solution:

Change substrate, reduce ink film thickness or increase drying capacity.

Problem:

On die cut or folding operations, anvil blankets are worn or rough cutting die pressure is excessive.

1. Folding belts are worn or slipping.
2. Guides, rails or bars are hitting print.
3. Stacker belts are hitting print.

Solution:

Optimize converting operations by replacing or trimming grinding anvil blankets, removing die rubber, replacing knives, reducing die pressure or replacing anvil blankets.

1. Replace or adjust folding belts.
 2. Adjust rails or bars to minimize impact.
 3. Move or lift belts from print area.
-

Problem:

Ink formulation is incorrect.



Solution:

Consult your local Sun Chemical representative.

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.

Mottled Print



Problem:

Surface finish or caliper of substrate is inconsistent.

Solution:

Increase plate to substrate impression or switch to softer plates.

Problem:

Plate impression is incorrect.



Solution:

Adjust plate to substrate impression.

Problem:

Substrate surface finish or textured pattern appears on surface.

Solution:

Replace stock. Check with a Sun Chemical representative for additives.

Problem:

Ink viscosity is too low.

Solution:

Raise viscosity by adding fresh ink.

Problem:

Too much water has been added to the ink, causing it to be out of balance.

Solution:

Add fresh ink or replace ink in press pump.

Problem:

Anilox roller, wiper roll, or printing plate is dirty or damaged.

Solution:

Clean or replace rolls or plate.



Problem:

Ink in press is contaminated.

Solution:

Clean press station and replace ink.

Problem:

Ink formulation is incorrect.

Solution:

Check with a Sun Chemical representative.

Problem:

Ink is foaming.

Solution:

Add defoamer. Investigate and eliminate the cause of foam.

Problem:

Ink pH is too low.

Solution:

Check and adjust pH (non-pH stable inks only).

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Poor Ink Coverage



Problem:

Plate impression is insufficient.

Solution:

Increase plate to substrate impression.

Problem:

Ink film is too thin for substrate characteristics i.e. too rough or porous.

Solution:

Increase ink film thickness by:

1. Raising ink viscosity.
 2. Decreasing metering of anilox roll; increasing anilox roll volume or reformulating ink for substrate.
-



Problem:

Printing plate is too hard.

Solution:

Use plates with a softer durometer.

Problem:

Substrate surface resists ink wetting and lay.

Solution:

Consult with a local Sun Chemical representative for additives.

Problem:

Ink is drying too fast.

Solution:

Slow drying with glycol or increase machine speed.

Problem:

Ink pH is too low.

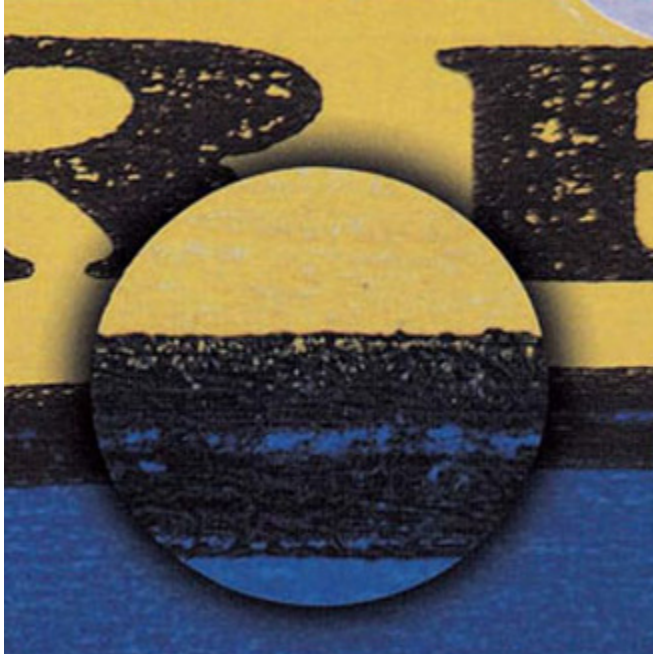
Solution:

Check and adjust pH (non-pH stable inks only).

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Poor Trapping



Problem:

First down ink is not dry due to improper ink or heavy ink film.

Solution:

Increase drying speed of the ink by:

1. Reducing first down ink viscosity
2. Reducing ink film with better metering
3. Changing ink formulation for faster drying
4. Decreasing machine speed
5. Decreasing anilox volume

Problem:

Second down ink is not covering due to low viscosity.

Solution:

Increase second down ink viscosity to higher than that of first down ink.



Problem:

Second down ink is not printing due to the ink drying too fast.

Solution:

Slow drying by adding glycol or increase press speed.

Problem:

Ink is not drying due to the high hold out of the substrate.

Solution:

Change substrate or reduce ink film thickness.

Problem:

Second down ink is not compatible with the first down ink.

Solution:

Use a transparent ink and switch trapping sequence.

Problem:

Second down ink is not printing due to too high or too low pH.

Solution:

Adjust pH or add fresh ink (non-pH stable inks only).

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Print Striations



Problem:

Ink is metered with a 2 roll system.

Solution:

Reduce ink on anilox roll by:

1. Increasing metering roll pressure
2. Using a harder durometer crown wipe roll
3. Changing to doctor blade metering
4. Changing ink formulation

Problem:

Anilox rolls are plugged worn or dirty. Rolls have wide cell lands or coarse screens.

Solution:

Replace or clean anilox rollers. Change ink viscosity or formulations.



Problem:

Printing plate is too hard.

Solution:

Use plates with a softer durometer.

Problem:

Ink viscosity is too low.

Solution:

Raise ink viscosity by adding fresh ink.

Problem:

Printing plates are glazed.

Solution:

Clean or replace plates.

Problem:

Ink formulation is incorrect.

Solution:

Consult your local Sun Chemical representative.

*The solutions provided from the troubleshooting guide are general in nature, please contact your sales or technical representative to discuss specific issues.



Uneven Print Color



Problem:

Ink metering system is out of adjustment or damaged.

Solution:

Check, adjust, repair or replace press components.

Problem:

Uneven color appears across press.

1. Light to dark from roll parallel.
2. Streaks from grooved wiper roll.
3. Streaks from worn doctor blade.
4. Streaks from warped blade.
5. Streaks from damaged anilox roll.
6. Streaks from dirty anilox roll.
7. Streaks from low ink flow.



Solution:

Optimize colors across press by doing the following:

1. Parallel all anilox/metering rolls/blades.
 2. Replace wiper roll.
 3. Replace doctor blade.
 4. Reduce blade pressure or replace blade.
 5. Replace anilox roll.
 6. Clean anilox roll.
 7. Increase ink flow through/across press.
-

Problem:

Uneven color appears through press variations.

1. Light to dark from low ink flow.
2. Loose plate or plate mount.
3. Roll bounce from gears or bearings.

Solution:

Optimize color through press by:

1. Increasing ink flow
2. Re-mount plates or mount to cylinder
3. Check or repair press as required

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Washboard Print



Problem:

Consistent variations appear in the caliper of corrugated substrate, corresponding with the flute profile.

Solution:

Use a sheet that does not have washboarding/fluting.

Problem:

Plate impression is incorrect.

Solution:

Adjust plate to substrate impression.



Problem:

Substrate surface finish resists ink wetting and laydown.

Solution:

Consult with local Sun Chemical Representative for additives.

Problem:

Ink film is too thick for high hold out substrates.

Solution:

Reduce ink film thickness or use a more porous substrate.

Problem:

Ink film is too thin for stock and the flute tip to flute valley caliper variation.

Solution:

Improve corrugation process. Increase ink film thickness. Change ink formulation for more transfer.

Problem:

Ink viscosity is too low.

Solution:

Raise viscosity by adding fresh ink.

Problem:

Ink formulation is incorrect.

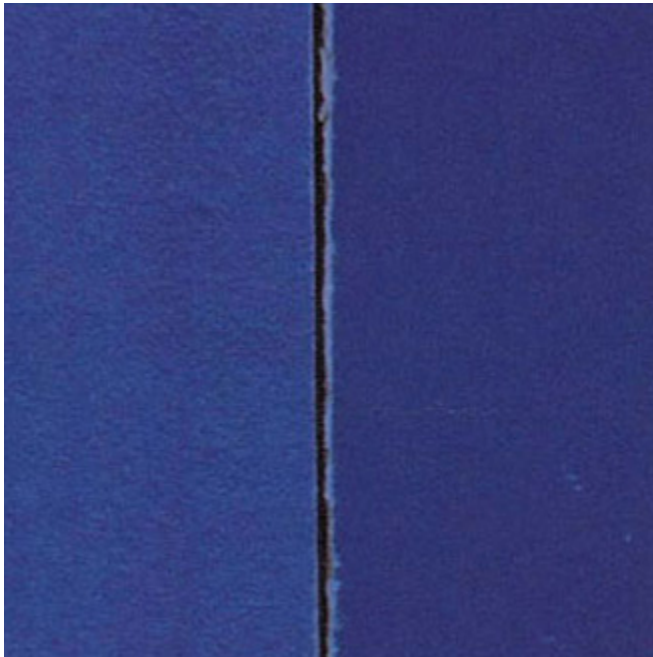


Solution:

Consult with a local Sun Chemical representative.

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Weak Print Color



Problem:

Too much water in the ink due to water in the press station, or operator error.

Solution:

Replace ink or add fresh ink. Repair station to drain wash up water. Measure amount of water added to ink.

Problem:

Anilox roll is worn or dirty.



Solution:

Clean or replace anilox roll.

Problem:

Ink viscosity is too low.

Solution:

Add fresh ink to raise viscosity.

Problem:

Ink film thickness is too low.

Solution:

Increase ink film thickness by:

1. Raising ink viscosity
 2. Reducing metering of the anilox roll
 3. Increasing anilox roll volume
 4. Adjusting ink for more transfer
-

Problem:

Plate impression is incorrect.

Solution:

Adjust plate to substrate impression.

Problem:

Ink does not contain enough color.



Solution:

Consult with a Sun Chemical representative.

Problem:

Printing plate is too hard.

Solution:

Use plates with a softer durometer.

Problem:

Plates are glazed or dirty.

Solution:

Clean or replace plates.

Problem:

Substrate surface resists ink.

Solution:

Consult with a Sun Chemical representative.

Problem:

Ink formulation is incorrect.

Solution:

Consult with a Sun Chemical representative.



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Sun Chemical | Email: globalmarketing@sunchemical.com

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