



...enviroflex

product guide...



Varn

Solutions to your press room problems...

For more than fifty years, we have earned the pressman's trust by providing quality products, designed for safety in use and protection to the environment. A continuous research and development programme linked with Day's technical support will ensure our position remains as No.1 in press room products.

Can we rest now?

Not if we want to keep your trust.

Varn Enviroflex Range...



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Enviroflex Adhesive Cleaner	<p>Enviroflex Adhesive Cleaner is a powerful, highly effective adhesive cleaner for both One-Pack and Two-Pack Glue Systems and also solvent based adhesives which are widely used throughout the converting, binding and finishing sectors. Also suitable for Two-Pack lamination and cold seal adhesives applications within the flexible packaging industries.</p> <p>Enviroflex Adhesive Cleaner is easy to use and combines exceptionally strong solvency characteristics with surprisingly low hazard when compared to other leading brands.</p> <p>Enviroflex Adhesive Cleaner removes difficult dried on adhesive residues from all Glue Systems and for the most difficult to remove adhesives use in conjunction with the Enviroflex Pad for superior results.</p> <p>Enviroflex Adhesive Cleaner should be used as part of a regular cleaning schedule to keep gluing systems in perfect working order and to promote good housekeeping.</p> <p>Enviroflex Adhesive Cleaner is fast and clean to use with a strong solvency level and fast evaporation rates.</p> <p>Enviroflex Adhesive Cleaner leaves no residues after use which is a major benefit for lamination users making faster start-ups possible.</p>	★
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Enviroflex Anilox Paste	<p>Enviroflex Anilox Paste is a concentrated, highly effective cleaning paste specifically formulated for the removal of aqueous, solvent and UV based inks from anilox rollers.</p> <p>Enviroflex Anilox Paste is easy to apply and can be used on other parts of the press.</p> <p>Enviroflex Anilox Paste is a unique non-drip formula which clings to metal and rubber surfaces to facilitate powerful cleaning.</p> <p>Enviroflex Anilox Paste should be used as part of a regular cleaning schedule to keep cells clear and produce optimum performance and quality.</p> <p>Enviroflex Anilox Paste can be used in conjunction with the Enviroflex range of washes to keep cell volumes at maximum.</p>	★
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Enviroflex Aquawash	<p>Enviroflex Aquawash is designed and developed as part of a full preventative press maintenance system from Varn International.</p> <p>Enviroflex Aquawash has been formulated using safe effective detergents and cleaning agents, suitable for cleaning aqueous based inks and coatings from most pressroom surfaces.</p> <p>Enviroflex Aquawash can be used on a daily basis for flushing and cleaning the ink metering system.</p> <p>Enviroflex Aquawash is developed for maximum performance and is specially formulated for use on all types of flexographic plates, anilox rolls, rubber fountain rolls, nip rolls, press frames and press room floors.</p> <p>Enviroflex Aquawash is a good all round flexographic cleaner designed to work alongside all ancillary pressroom cleaning equipment. It can be dosed direct into automated press wash down systems, ancillary plate wash down systems, bucket wash systems, pressroom cleaning tanks and automated floor cleaning machines.</p>	★
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Enviroflex Pad	<p>The Varn Enviroflex Pad is a unique cleaning product which has been specifically developed for use in conjunction with the Varn Enviroflex range of washes, to meet the tough demands of the Flexo printing industry.</p> <p>The Varn Enviroflex Pad has been specially designed to penetrate deep into each microscopic anilox roller cell, and provide maximum cleaning performance on even the most stubborn ink residues.</p> <p>The Varn Enviroflex Pad is specially formulated for effective cleaning of CTP plates and intaglio gravure cylinders.</p>	★
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Enviroflex Pro-Kleen	<p>Enviroflex Pro-Kleen is designed and developed as part of a full preventative press maintenance system from Varn International.</p> <p>Enviroflex Pro-Kleen has been formulated using safe effective detergents and cleaning agents, suitable for cleaning aqueous based inks and coatings from most pressroom surfaces.</p> <p>Enviroflex Pro-Kleen can be used on a daily basis for flushing and cleaning the ink metering system.</p> <p>Enviroflex Pro-Kleen is developed for maximum performance and is specially formulated for use on all types of flexographic plates, anilox rolls, rubber fountain rolls, nip rolls, press frames and press room floors.</p> <p>Enviroflex Pro-Kleen is a good all round flexographic cleaner designed to work alongside all ancillary pressroom cleaning equipment. It can be dosed direct into automated press wash down systems, ancillary plate wash down systems, bucket wash systems, pressroom cleaning tanks and automated floor cleaning machines.</p>	★
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Remember: when using chemical cleaners, always wear safety goggles and gloves. Good cleaners will degrease the skin! The Enviroflex range is only mildly alkaline (pH 8-10), but safety glasses should be worn due to the possibility of accidental splashing.

For a full technical product information leaflet on any Varn product, or any other Day International products, e-mail us at salesuk@day-intl.com or visit us at www.dayintl.com

Varn Enviroflex Range...

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<p>Enviroflex SC Cleaner</p>	<p>Enviroflex SC Cleaner is an extremely effective Speciality Coatings Cleaner with strong solvency qualities and has been formulated using a careful blend of environmentally friendly ingredients. Enviroflex SC Cleaner is suitable for use on all flexographic applications and has been formulated to deal with the most stubborn and troublesome lacquers, varnishes, resins & UV based ink systems. Enviroflex SC Cleaner has been developed for faster and more effective cleaning and is specially formulated for use on all types of flexographic plates, anilox rolls, rubber fountain rolls, nip rolls, press frames and press room floors. Enviroflex SC Cleaner is a good all round flexographic cleaner, designed and developed to work in conjunction with all ancillary pressroom cleaning equipment.</p>	<p>★</p>
<p>Enviroflex Ultra Heavy Duty Cleaner</p>	<p>Enviroflex Ultra Heavy Duty Cleaner is the ultimate heavy duty cleaner specially formulated for the easy removal of the most challenging of hard dried down inks & coatings. Enviroflex Ultra Heavy Duty Cleaner is a blend of extremely powerful ink removing solvents, which have been specifically developed to effectively remove aqueous, solvent and UV based inks and coatings. Enviroflex Ultra Heavy Duty Cleaner will thoroughly deep clean and rejuvenate anilox rollers either on or off the press, optimising anilox roller life and optimising performance. Increasing density giving more ink mileage to the user.</p>	<p>★</p>
<p>Enviroflex Ultrasonic Cleaner</p>	<p>Enviroflex Ultrasonic Cleaner has been formulated using powerful yet environmentally friendly detergents and cleansing agents. Enviroflex Ultrasonic Cleaner is suitable for aqueous, solvent and UV based inks and coatings. Enviroflex Ultrasonic Cleaner has been formulated for maximum performance in all ultrasonic cleansing baths and is recommended by manufacturers. Enviroflex Ultrasonic Cleaner has been formulated to deep clean anilox cells without the risk of damage to the roller.</p>	<p>★</p>
<p>Enviroflex UV Cleaner</p>	<p>Varn's Research and Development Laboratory in Europe worked with leading ink, roller, plate and blanket manufacturers to produce a low toxic, low swell roller, plate and blanket cleaner especially designed for U.V. inks. Enviroflex UV Cleaner has unique anti-corrosion additives and is water miscible to remove glaze and piling. It has a very low swell advantage on EPDM and nitrile rubber compounds. Enviroflex UV Cleaner should not be confused with competitive U.V. washes on the market which attack the rubber surfaces causing swell on rollers and plates, and delamination of blankets. It should NOT be used for oil-based inks.</p>	<p>★</p>

Always Remember...

- The care and maintenance of any press component is important to ensure long life and maintain a high level of print quality.
- When cleaning ceramic anilox rolls, remember ceramic coatings will not tolerate long term immersion in alkaline permanganate, ammonium citrate or non-oxidising acids such as phosphoric, sulphuric or hydrochloric acids.
- Check the ink metering system daily for build-ups of substrate dust, and clean when necessary.
- When cleaning chamber bodies, take into account chemical erosion may occur.
- When cleaning plates, nips rollers, bow rollers and fountain rollers, remember that all rubber types, whether natural or synthetic, have a porous structure. They can swell to a greater or lesser degree upon contact with chemicals.
- To reduce ink contamination, fit filters to the ink metering system. In addition, magnetic filters and/or fine mesh strainers should be fitted with chambered systems.

Daily Preventative Press Washdown Procedure...

- 1 Ensure Enviroflex container is full.
- 2 Stop the machine.
- 3 Drain ink from system.
- 4 Replace with Enviroflex solution.
- 5 Circulate the Enviroflex solution for several minutes around the entire ink metering system.
- 6 Stop the pump and drain back the system.
- 7 Remove the Enviroflex solution.
- 8 Start the machine's rinse cycle.
- 9 When finished, ink up the press.

Preventative Weekly Deep Cleaning Procedure...

- Varn recommends the entire ink metering system should be deep cleaned using neat Enviroflex solution once a week.
- This gives deep penetrative cleaning to the entire ink metering system.

Contamination...

- Excess build-ups of ink left in trays can cause contamination problems. Please check the trays during order changes, and change when necessary.



Day recognise the ever increasing demands of today's Flexographic Market. As such, a team of dedicated chemists meticulously evaluate the latest raw materials and manufacturing techniques in an ongoing research and development programme. This ensures that only the highest quality products are available to our customers.

Quality is second nature to Day and attention to detail is of paramount importance. All raw materials are rigorously quality inspected to exacting standards before the manufacturing process begins. The same high standards are adhered to throughout the manufacturing process and only when all criteria are met is the product released. All Day quality control procedures conform to **ISO 9002**.

As a manufacturer of speciality chemical products, we recognise that many of Day's processes and procedures have the potential to provide an environmental impact. Protection and enhancement of the environment has always been of paramount importance to Day. With the introduction of **ISO 14000**, Day have now put in place the structure to continually assess and improve our commitment to environmental issues.

Day use only the latest manufacturing techniques to produce the highest quality product available. This ensures product stability, consistency and the highest possible performance on press.

Day's dedicated Technical Sales Team fully understand the pressroom environment application and the various control systems used on press. They are committed to working with our customers to ensure the correct choice and application of the Varn range of products to combine performance and economy.

Problems associated with insufficient wash-down/cleaning procedures...

PROBLEMS	EFFECTS SEEN	CAUSE	SOLUTION
Filling in	Piling or specks of excess ink around small fine text areas or tonal dots.	<ol style="list-style-type: none"> 1 Specks of pigment. 2 Specks of foreign matter. 3 Uncontrolled ink viscosity. 4 Excessive inking. 5 Ink drying too fast. 6 Fountain rollers too soft. 	<ol style="list-style-type: none"> 1 Use well dispersed inks, free from large pigment particles. 2 Ensure all pumps, pipes, trays and metering rolls are clean. 3 Maintain the correct ink viscosity and do not allow to drift. 4 Reset impressions and always try for minimal contact pressures. 5 Retard the drying rate of the ink. 6 Check fountain roller specs and replace if necessary. Make sure cleaning materials are compatible to rubber compounds.
Feathering	Irregular excessive edges around printed design.	<ol style="list-style-type: none"> 1 Uncontrolled ink viscosity. 2 Debris being picked up from substrate. 3 Incorrect pressure settings between anilox and plate. 	<ol style="list-style-type: none"> 1 Maintain correct ink viscosity. 2 Clean when necessary, adjust "tack rate", lower the ink viscosity to lower its tack. 3 Reset the impression and try to achieve kiss contact between the rollers.
Ink doesn't transfer properly	Print very weak or patchy.	<ol style="list-style-type: none"> 1 Metering rolls not set correctly. 2 Badly worn, plugged or too fine an anilox being used. 3 Ink doesn't form a continuous film over the surface. 	<ol style="list-style-type: none"> 1 Reset the ink metering rollers and impressions. 2 Clean or change the anilox back to within the specified limits. 3 Increase amount of ink applied. Check and clean anilox roller if necessary.
Mottled	Unwanted indistinct patterns of lighter and darker areas within the print.	<ol style="list-style-type: none"> 1 Dirty or pitted impression cylinder. 2 Residues of unwanted cleaning materials left on the plate surface. 3 Badly worn and blistered anilox roller. 	<ol style="list-style-type: none"> 1 Impression cylinder must be thoroughly cleaned of ink and other foreign materials. 2 Wash plates thoroughly with a safe recommended proprietary cleaner. 3 Use a safe recommended proprietary cleaning solution and stay within the specified pH values when cleaning anilox rolls.
Ghosting	The production of a second faint image being printed along with the design.	<ol style="list-style-type: none"> 1 Ink drying on anilox roller. 2 Improperly cleaned anilox roll. 	<ol style="list-style-type: none"> 1 Check viscosity and drying rate of ink. 2 Clean anilox roll immediately after use; never allow inks to dry in the cells.
Hickeys	Wondering holes or specks in the printed image.	<ol style="list-style-type: none"> 1 Foreign matter sticking to the printing plates. 2 Foreign matter sticking to the ink rollers. 	<ol style="list-style-type: none"> 1 Clean plates using a safe proprietary cleaner. 2 Incorporate good wash down procedures and fit fine mesh filters to the ink return and feed pipes.
Screening	A pattern of small holes appearing in the surface of solid print.	<ol style="list-style-type: none"> 1 Badly worn anilox roller. 2 Ink drying on anilox roller. 	<ol style="list-style-type: none"> 1 Consult anilox supplier and change when necessary. 2 Retard drying rate of ink. stop and clean anilox roller.
Striation/streaking	Striation lines in the printed image.	<ol style="list-style-type: none"> 1 Cracked or damaged metering rolls. 2 Faulty inks. 	<ol style="list-style-type: none"> 1 Replace damaged rollers. Use compatible proprietary cleaner when cleaning the ink metering rolls. 2 Check with ink supplier. Make sure all proprietary cleaning materials are compatible.
Scratching	Fine lines of missing print running in direction of web.	<ol style="list-style-type: none"> 1 Contaminated inks. 2 Web catching and rubbing on dirty press components. 3 Seized path rollers catching and scratching the web during passage. 	<ol style="list-style-type: none"> 1 Sieve inks before going to press. Fit fine mesh filters to both the feed and return pipes to filter out any unwanted debris. 2 Make sure all press components are clean prior to running. 3 Same as above.
Incorrect colour strength	Colour too strong.	<ol style="list-style-type: none"> 1 Viscosity too high. 2 Poorly metered ink film. 	<ol style="list-style-type: none"> 1 Reduce ink to required viscosity. 2 Check anilox specs.
Incorrect colour strength	Colour too weak.	<ol style="list-style-type: none"> 1 Viscosity too low. 2 Badly plugged, worn or wrong ageing used. 3 Badly mixed inks. 4 Improper setting of metering rolls. 	<ol style="list-style-type: none"> 1 Re-blend the ink and control viscosity. 2 Check anilox specs and clean if necessary. 3 Consult ink supplier. 4 Reset metering rolls.



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