

*Rely on us.*SM

RAL-UZ 195 Compliant Products for Heatset Web Printers

FlintGroup

High performance products with lower environmental impact

Flint Group are pleased to present our portfolio of products for printers seeking Blue Angel certification. The Blue Angel is an environmental label organised by the federal government of Germany for the protection of people and the environment. It sets very exacting standards, is independent and has proven itself over more than 35 years as a guide for selecting environmentally-friendly products. The Blue Angel for Printed Matters (RAL-UZ 195) is awarded to printed matter that represents an environmentally friendly alternative to standard printed matter available on the market.



Specially developed to meet the Blue Angel criteria, Flint Group's product range confirms our commitment to the environment and to ensuring best in class products are at the heart of our portfolio. These products have been developed to deliver exceptional performance characteristics coupled with leading environmental benefits.

PremEco Heatset Process Inks

Additional criteria for printing inks have to be fulfilled: the use of several heavy metals is limited or forbidden. Pigments which may cleave dangerous primary aromatic amines are not allowed to be used. For the use of mineral oils in printing inks there are detailed criteria which become obligatory from January 2017. The use of aromatic hydrocarbons is restricted to 1% and for aliphatic hydrocarbons there are restriction for molecules with chain length between C20 and C30. Flint Group's [PremEco BE Series](#) meets all these criteria.



In partnership with WKS Group, our new [PremEco BE Series](#) has been developed especially with the environment in mind. WKS Group are a leading German Heatset printer and

An Overview – The Blue Angel for Printed Matters: RAL-UZ 195

Printed materials are widely distributed and the energy and resources required for their production can have a significant impact on the environment. Managing and reducing the environmental impact of printing materials has been an increasingly important feature of our industry over many years, and continues to be an on-going element of product and process development. The Blue Angel for Printed Matters is awarded to printed matter that represents an environmentally friendly alternative to standard printed matter available on the market.

The criteria to obtain this ecolabel are widespread. Firstly, the substrate used for the printed products should already conform to Blue Angel (UZ 14 or UZ 72). There are restrictions for the use of materials such as PVC or chromium plated metals. Substances and mixtures used in the process are not allowed to be classified as toxic, CMR or harmful to the environment. Raw materials obtained from renewable resources should not be derived from genetically modified organisms and not cause the destruction of jungles. Furthermore, there are criteria for the use of adhesives. To enable recycling at the end of its lifetime, the de-inkability of the printed matter has to be tested. And finally there are numerous criteria for the print shop with requirements on emissions, pre-press procedures, paper waste, energy management and energy consumption.

pioneer for sustainable production technologies. Benefitting from a wide range of press sizes including the world's only 160pp press, they have become the first Heatset printer using Heatset ink from Flint Group to receive the new Blue Angel certification for printed matters (RAL-UZ 195).

As Flint Group also has a leading role in the development of environmental standards for the printing industry, WKS Group and Flint Group have established a development partnership for the further advancement of Heatset ink. In the course of this cooperation, Flint Group has developed the [PremEco BE Series](#) and undertaken extensive tests for all paper grades (LWC, SC, Newsprint). The outcome of this successful development partnership is that Flint Group now supplies WKS Group exclusively with PremEco BE.





Heatset Blanket and Roller Washes

The following requirements apply for Press Room Chemicals used in the printing process:

For washes there are restrictions on aromatic hydrocarbons (<1%) and chlorinated solvents. The flashpoint has to be greater than 55°C but ideally should be above 100°C.

Fountain solution additives shall contain VOC levels less than 10 %; although higher values are acceptable providing that a valid justification is given. The readymade fountain solution must contain less than 3% IPA in formulation.

Flint Group have a variety of washes and fountain solutions that meet Blue Angel criteria and are listed opposite.



Varn Natural Wash

FOGRA approved, economical, environmentally friendly product for use in automatic washing systems. Designed to comply with explosion limits for the safe operation of heatset ovens.

Varn HS Fastwash Elettra

FOGRA approved, for use in Elettra automatic washing systems. Designed to comply with explosion limits for the safe operation of heatset ovens.

Varn HSW 9189

FOGRA approved, economical, environmentally friendly product for use in automatic washing systems including Impact Fusion system. Designed to comply with explosion limits for the safe operation of heatset ovens.

Varn Green Wash HS

FOGRA approved, vegetable based product for use in automatic washing systems. Designed to comply with explosion limits for the safe operation of heatset ovens.

Varn Non VOC Wash

FOGRA approved, general purpose AIII wash. Zero VOC content economical, environmentally friendly product.



Heatset Fountain Solutions

Varn Durafount

FOGRA approved, revolutionary paper friendly formulation designed to minimise the problems of vanishing dots and paper deposit build up in tanks.

Varn HSF 8721

Specifically formulated to help combat ink feedback issues. Extremely quick, clean start-up.

Varn Sunday Fount

Formulated for high-speed Heidelberg Sunday and Goss M-Series presses.

Varn AF Superspeed

Designed for older presses. Eliminates the need for alcohol.

Varn HSF 9153 (250)

Designed for modern high-speed presses, gives longer intervals between blanket wash-ups.

Varn HSF 9209

Gives improved performance on Goss presses. Stronger desensitising properties, wider ink/water balance.

Varn HSF 8831

Formulated for high-speed Heidelberg Sunday and Goss M-Series presses.

Varn Elite *

FOGRA approved, specially formulated for high-speed, wide format manroland presses. Will run alcohol free on both integrated and non integrated dampening systems, minimising ink feedback and maintaining clean tanks.

E9165 / E9168 *

FOGRA approved, designed for high-speed Manroland presses. Advanced buffer system with improved clay wash-out.

* Although these products sit outside the standard Blue Angel criteria for fountain solutions; having a higher VOC level than the suggested limit, we regard them as acceptable for use with an additional justification in the application process. The increased VOC's are offset by reduced washing intervals; which minimise the quantity of solvents in the printing process whilst also decreasing paper wastage.





Heatset Silicone Emulsions

The ability of Flint Group to manufacture our own silicone oils, unique within suppliers of silicone emulsions into the print industry, has enabled us to create a new type of silicone technology which drastically reduces the amount of silicone oil required to provide anti-marking and slip properties. This patented technology results in a silicone film with a lower migration into the paper surface and a higher concentration of a more effective silicone oil at the paper surface where it can provide better and more efficient lubrication.

Varn FBS 6500	Wax free silicone emulsion - 50% solids.
Varn FBS 3500	Wax free silicone emulsion - 32% solids.
Varn Pro-Web Titanium Plus	Silicone emulsion with added slip agents - 50% solids.
Varn Pro-Web Rhodium Plus	Silicone emulsion with added slip agents - 40% solids.
Varn Pro-Web Platinum Plus	Silicone emulsion with added slip agents - 32% solids.
Varn Pro-Web Gold Plus	Silicone emulsion with added slip agents - 26% solids.
Varn Pro-Web Silver Plus	Silicone emulsion with added slip agents - 18% solids.



There are currently no requirements placed on printing blankets regarding compliance with RAL-UZ 195. However, Flint Group blankets are manufactured in a state-of-the-art facility where the rubber face compound is extruded, significantly reducing the levels of solvents normally associated with liquid rubber manufacturing techniques. Thus having a significant environmental benefit.



Heatset Printing Blankets

dayGraphica 3610	The ideal blanket for optimum print performance on all high speed web applications.
dayGraphica 5000	Featuring DuraZone technology for highest quality and longevity on coated stocks. Minimal gauge loss over long use cycles.
dayGraphica 5700	Featuring DuraZone technology for highest quality and longevity on coated and uncoated stocks. Easy to clean, resists ghosting.
Ducoweb	Versatile high quality blanket for all web applications. Delivers consistent print pressure for better print quality.



Heatset Metalback Blankets and Sleeves

dayGraphica QC 3192 (1.62mm) dayGraphica QC 3193 (1.76mm)	Built with innovative DuraBond technology, these metalbacked blankets for commercial Heatset presses raise the industry standard for delamination resistance and durability.
dayGraphica t3000	High quality, fibreglass-composite or nickel based gapless sleeves for all Goss Sunday and manroland Rotoman S and Lithoman S presses.

Blue Angel RAL-UZ 195 – Benefits to Environment and Health

- Preserves resources due to a high proportion of recovered paper in the paper and cardboard used.
- Enables high-quality recycling due to the use of inks, varnishes and adhesives that do not prevent the high-quality recyclability of the paper fibres, as well as the use of renewable raw materials.
- Avoids the use of additives and materials that are damaging to the environment and health.
- Reduces energy usage, waste and environmentally harmful emissions.

Flint Group's Print Media business is formed by the powerful combination of inks, printing blankets, pressroom chemicals, pigments and, most of all, the people who bring them all together for our customers.

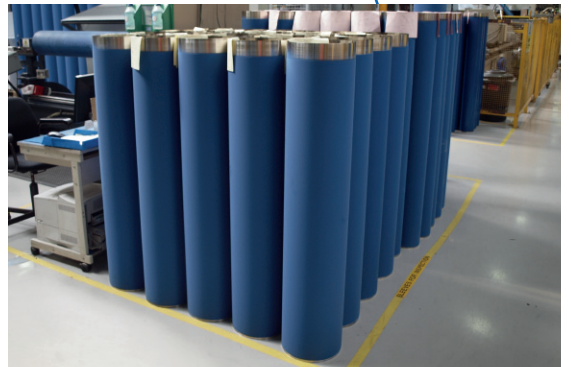
How does Flint Group balance the products we make with our focus on safety, society, the economy and the environment? How do we manufacture products, which do require chemicals even as we maximise use of naturally renewable resources, while maintaining a strong, sustainable business that customers depend on and trust? The answer: people. Print Media's employees envision and realise products and programmes that address these complex considerations.

Flint Group employees are charged with continually improving the way we work and the products that result from this process. Over and over, they rise above expectations. From a sustainability perspective, their focus can be grouped into two categories.

First are the safety, health and environmental programmes and processes by which we manage our business. Flint Group is committed to meeting and/or exceeding all local, regional, national and international regulatory requirements related to the environment, and to the health and safety of our employees, our customers who use our products, and consumers.

The second category encompasses products that are environmentally compliant and competitively advantageous, as well as the service and support that back each product. We also provide best practice guidance about the optimal use of printing consumables to help customers minimise waste and maximise their operational sustainability efforts.

The other end of the supply chain is equally important. Our employees ensure that every raw material used by Flint Group undergoes a review process based on recognised health and safety standards. Our teams design product formulas that utilise renewable resources where technically feasible. The search for ways to incorporate more renewable materials into our products is an ongoing process.



Flint Group's Technical Specialists are available to assist with your RAL-UZ 195 application





**More Products You Need.
Expert Support You Deserve.
And, Peace of Mind.**

For further information please visit

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FlintGroup