RADIORPLUS® high transfer
High brilliance sheetfed offset metallic ink

RADIORPLUS® high transfer is a metallic ink formulated for conventional sheetfed offset and its scope for use is very diverse. It offers an ideal balance between a strong metallic brilliance and exceptional transfer properties. It is suitable for a wide range of substrates and its use ensures excellent printability.

- The high quality of the bronze and aluminium pigments used ensures a very good metallic brilliance. It is a product particularly suited to the printing of commercial documents, labels and high quality packaging.

- Excellent transfer on high speed presses due to the presence of 2 microns pigments which facilitates good roller distribution. The excellent tack stability provides consistent transfer and this, even on very long runs.

- Excellent covering power (solids) and good print definition especially on very fine detail.

- Very large scope for use

- Substrates: coated paper, coated carton, metal

Available in all shades within the range.

Information on RADIORPLUS® high transfer

SUBSTRATES, VARNISHING, LAMINATION, SETTINGS, PRINTING SPEED:
technical as well as material safety data sheets on RADIORPLUS® high transfer are available on request: contact@radior.fr

STORAGE: recommended storage of the inks between 15°C and 25°C to maximise the shelf life

SHELF LIFE:
6 months in original sealed packaging.

PACKAGING:
1 kg, 4 kg for Gold - 1 kg, 2.5 kg for Silver
Other metallic inks are also available. These have been especially formulated to print on metal, in Dry Offset, on IML labels... the Radior Laboratory is capable of creating or adapting numerous formulations in order to respond to all types of requests and more especially in the print packaging sector. We are happy to consider all requests for special applications and we can invariably offer one of the inks from this speciality range.

**RADIORPLUS® LO/LM**

Low odour and low migration metallic inks for food packaging

- This is a highly specialised product developed for printing Labels and cartons dedicated to food packaging. This ink has been formulated to minimise the migration of the materials through to the inner packaging. The RADIORPLUS® LO/LM provides a good transfer on the press and a very high metallic brilliance.
- Substrates: coated papers and coated cartons

*Available in all shades within the range.*

**RADIORPLUS® SA**

Metallic ink designed for offset presses without alcohol

- An increasing number of presses run with little or no alcohol in the damping solution. RADIOR has developed a specific metallic ink for this type of damping solution. The RADIORPLUS® SA provides very good transfer on the press and stability even during long print runs.
- Substrates: coated paper and coated cartons

*Available in all shades within the range.*

**RADIORPLUS® low VOC - Silver**

Metallic ink suitable for varnishing and lamination.

**RADIORPLUS® fast setting - Silver**

Metallic ink designed to print on porous substrates. Highly film forming, it will improve the metallic brilliance and facilitate varnishing.

**RADIORPLUS® hard drying - Silver**

Metallic ink having excellent rub resistance. This ink may be used when a protective varnish is not included in the design.

**RADIORPLUS® NL - Silver**

This ink is based on a non leafing Aluminium pigment. It serves mainly as a base to create imitation gold shades (beer labels for example) or metallised shades. When used only as a Silver, coverage will be weak but the ink does offer excellent rub resistance.

**RADIORPLUS® silver base**

Metallic ink designed to be overprinted in line. Stationed on the first unit of the press, it may then be easily overprinted with the 4- Colours /Process Inks.

Information on RADIORPLUS® speciality inks

**SUBSTRATES, VARNISHING, LAMINATION, SETTINGS, PRINTING SPEED**

Technical as well as material safety data sheets on the RADIORPLUS® are available on request:

contact@radior.fr

**STORAGE** : recommended storage of the inks between 15°C and 25°C to maximise the shelf life.

**SHELF LIFE** : 6 months in original sealed packaging.

**PACKAGING** : 1 kg, 4 kg for Gold - 1 kg, 2.5 kg for Silver.
RADIORPLUS® UV
UV curing metallic inks for offset and letterpress

**RADIORPLUS® UV high gloss**

Ready mixed UV metallic ink.
- This ink is designed for sheetfed UV offset and UV letterpress (rotary).
- The size of the bronze pigment (3 microns) and the aluminium used ensure a very high metallic brilliance which is especially suited to the printing of labels and high quality packaging.
- Excellent behaviour on the press, very good transfer with fast curing. The RADIORPLUS® UV ensures very good productivity.
- Very good stability
- Substrates: coated paper, coated cartons and metal. Synthetic substrates (subject to pre-testing).

*Available in all shades within the range.*

**SERIES 53000**

Two component UV metallic inks
- This ink is suitable for the printing of sheets as well as reel to reel.
- The series 53000 is based on a paste + varnish to be mixed just before printing
- The fresh mix as well the quality of pigments used ensures a very high metallic brilliance, which makes this series particularly suited to the printing of labels and high quality packaging
- Substrates: coated paper, coated cartons and metal. Synthetic substrates (subject to pre-testing).
- Stability once mixed is limited to a few hours

*Available in all shades within the range.*

**RADIORPLUS® UV high transfer Silver**

This UV metallic ink provides an excellent transfer on the press at high print speeds
- Excellent transfer on the press at high speeds owing to the presence of a very fine Bronze pigment. This helps the distribution and transfer on the rollers. This ink as a result, gives excellent productivity.
- Excellent covering power and very good definition on the fine details.
- The RADIORPLUS® UV high transfer provides a very high metallic brilliance but slightly inferior to that of the UV high gloss Silver.

**Technical information on RADIORPLUS® UV**

**SUBSTRATES, VARNISHING, LAMINATION, SETTINGS, PRINTING SPEED:**
- technical as well as material safety data sheets on the RADIORPLUS® UV are available on request: contact@radior.fr

**STORAGE:**
- recommended storage at between 5°C and 25°C to maximise its shelf life.

**SHELF LIFE:**
- 6 months in original sealed packaging

**PACKAGING:**
- 1 kg for Gold and Silver in one component
- 1 kg for the Gold pastes and varnishes in the series 53000
- 0.3 kg for the Silver paste

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**COLOURS IN THE RANGE**
- Pale gold
- Rich pale gold
- Rich gold
- Silver
- PANTONE® 871
- PANTONE® 872
- PANTONE® 873
- PANTONE® 874
- PANTONE® 875
- PANTONE® 876
- PANTONE® 877

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LIQUIMETAL® W
Water based metallic inks for tower coaters

The LIQUIMETAL® W range (waterbased flexo) has been formulated for printing on tower coaters situated at the end of sheetfed presses (or at the beginning). These inks are particularly suited to the printing of labels or high quality packaging requiring a superior metallic brilliance to that obtained with normal offset metallics. This excellent metallic brilliance is attributed to a large extent on the size of the metallic pigments used in flexography. The transfer through the chambered doctor blade, moreover, allows the printing of large solids as well as very fine definition. In conjunction with the LIQUIMETAL® W ink, the anilox should be carefully chosen to ensure the optimum result is achieved.

LIQUIMETAL® W high gloss
Metallic inks waterbased providing a strong metallic brilliance. The result is however subject to the use of an appropriate anilox (10 - 12 cm³).
Available in all shades within the range.

LIQUIMETAL® W high transfer
Metallic inks waterbased ensuring an excellent transfer and this even with fine aniloxes (6 - 8 cm³). It is adapted for the printing of large solids or very fine details.
Available in all shades within the range.

LIQUIMETAL® W met ef
These metallic inks waterbased are formulated from pigments much coarser than the ones used in the traditional metallics. It provides therefore, a material effect approaching that of dusting bronze.
Available in Pale gold, Rich pale gold, Rich gold and Silver.

LIQUIMETAL® W - SD Silver
This silver is based on a non-leafing aluminium pigment of very high quality. This type of pigment ensures the best resistance to rub and overprintability of this ink when it is printed as a solid.
Available only in Silver.
It may also serve as a base to obtain metallised colours by mixing or by overprinting (imitation gold, metallised blue, etc.)
The series LIQUIMETAL® UV (UV curing) is a range of metallic inks printed through a tower coater unit situated at the end (or at the beginning) of sheetfed offset presses. They are particularly suitable for the printing of labels or high quality packaging producing metallic brilliance superior to that obtained with the standard offset metallics.

This superior metallic brilliance is obtained in large part due to the presence of large metallic particles used in flexography. The transfer through the chambered doctor blade unit permits the printing of large solids as well as very fine details. In conjunction with the LIQUIMETAL® UV ink, the Anilox should be carefully chosen to ensure the optimum result is achieved.

LIQUIMETAL® UV high gloss
UV Metallic inks providing a high metallic brilliance. The result is however subject to the use of an appropriate anilox (10 - 12 cm³).
Available in all shades within the range.

LIQUIMETAL® UV high transfer
UV Metallic inks ensuring an excellent transfer and this even with fine aniloxes (8 - 10 cm³). It is adapted for the printing of large solids or very fine details.
Available in all shades within the range.

LIQUIMETAL® UV metal
These metallic inks UV are formulated from pigments much coarser than the ones used in the traditional metallics. It provides therefore, a material effect approaching that of dusting bronze.
Available in Pale gold, Rich pale gold, Rich gold and Silver.

LIQUIMETAL® UV metallic inks for tower coaters

COLOURS IN THE RANGE
- Pale gold
- Rich pale gold
- Rich gold
- Silver
- PANTONE® 871
- PANTONE® 872
- PANTONE® 873
- PANTONE® 874
- PANTONE® 875
- PANTONE® 876
- PANTONE® 877

Information on LIQUIMETAL® UV

SUBSTRATES, VARNISHING, LAMINATION, SETTINGS, PRINTING SPEED:
Technical as well as material safety data sheets on the LIQUIMETAL® UV are available on request:
contact@radior.fr

STORAGE:
It is recommended the inks are stored at between 5° and 25°C to maximize the shelf life.

SHELF LIFE:
6 months in original sealed packaging.

PACKAGING:
25 kg pail for Gold and Silver
The SMART INKS® W range has been developed to print water based flexography on narrow web presses. They are particularly suited to the printing of labels and high quality packaging paper which requires a high metallic brilliance. RADIOR offers a comprehensive range based on pigments of different sizes in order to adapt to the various demands with regard to design and aniloxes available.

Information on SMART INKS® W

**COLOURS IN THE RANGE**
- Pale gold
- Rich pale gold
- Rich gold
- Silver
- PANTONE® 871
- PANTONE® 872
- PANTONE® 873
- PANTONE® 874
- PANTONE® 875
- PANTONE® 876
- PANTONE® 877

**SMART INKS® W high gloss**
Water based metallic inks providing a high metallic brilliance. The result is however subject to the use of an appropriate anilox (10 - 12 cm³).
Available in all shades within the range.

**SMART INKS® W high transfer**
Water based metallic inks ensuring an excellent transfer and this even with fine aniloxes (8 - 10 cm³). It is adapted for the printing of large solids or very fine details.
Available in all shades within the range.

**SMART INKS® W met ef**
These metallics inks Waterbased are formulated from pigments much coarser than the ones used in the traditional metallics. Its provides therefore, a material effect approaching that of dusting bronze.
Available in Pale gold, Rich pale gold, Rich gold and Silver.

**SUBSTRATES, VARNISHING, LAMINATION, SETTINGS, PRINTING SPEED:**
Technical as well as material safety data sheets on the SMART INKS® W are available on request:
contact@radior.fr

**STORAGE:**
It is recommended the inks are stored at between 15° and 25°C to maximize the shelf life.

**SHELF LIFE:**
6 months in original sealed packaging.

**PACKAGING:**
5 kg jerrican for Gold and Silver
SMART INKS® UV
Metallic inks for UV flexo

SMART INKS® UV is a range of metallic inks developed to print UV flexography on narrow web presses. They are particularly suited to the printing of labels or high quality paper packaging which require a strong metallic brilliance. RADIOR offers a complete range formulated with pigments of different sizes in order to adapt to the various demands with regard to design and aniloxes available.

Information on SMART INKS® UV

SUBSTRATES, VARNISHING, LAMINATION,
SETTINGS, PRINTING SPEED:
Technical as well as material safety data sheets on the SMART INKS® UV are available on request: contact@radior.fr

STORAGE:
It is recommended the inks are stored at between 5°C and 25°C to maximize the shelf life.

SHELF LIFE:
6 months in original sealed packaging.

PACKAGING:
5 kg pail for Gold and Silver

SMART INKS® UV high gloss
UV metallic inks providing a high metallic brilliance. The result is however subject to the use of an appropriate anilox (10 - 12 cm³).
Available in all shades within the range.

SMART INKS® UV high transfer
Metallic inks UV ensuring an excellent transfer and this even with fine aniloxes (8 - 10 cm³). It is adapted for the printing of large solids or very fine details.
Available in all shades within the range.

SMART INKS® UV met ef
These metallic inks UV are formulated from pigments much coarser than the ones used in the traditional metallics. It provides therefore, a material effect approaching that of dusting bronze.
Available in Pale gold, Rich pale gold, Rich gold and Silver.
SUPRAMETAL® inks are produced from metallised aluminium pigments under vacuum (VMP). This process is very long and complicated but results in very special aluminium pigments which provide a metallic brilliance superior to the normal type of aluminium pigments.

The printing on very impermeable substrates with a smooth surface enables the SUPRAMETAL® to produce an exceptional metallic effect. In certain cases, it can be referred to as a Chrome or a Mirror effect.

These inks are designed to print on commercial documents and packaging of High quality for which a high metallic brilliance is demanded.

In certain cases, the SUPRAMETAL® inks could replace hot foiling, cold foiling as well as metallised substrates. Without imitating perfectly these processes, the metallic brilliance of SUPRAMETAL® can approach these effects sufficiently to offer a credible and practical alternative.

The production of these inks being very complex, their cost is very high in comparison to the standard metallic inks. But, when they are compared to the cost of foiling or the metallised substrates, the SUPRAMETAL® becomes an economical alternative. This is especially true if the unprinted surface is less than 30-40% of the total surface.

The possibilities afforded by the SUPRAMETAL® are multiple. Therefore their use is subject to the parameters of printing being precise to ensure that the maximum brilliance is attained. Technical support is available for all information concerning the use of the SUPRAMETAL® inks.
The inks in the FLUOSMART® range are highly concentrated and provide an intense fluorescent effect. They are particularly suited to the printing of the cover of magazines, promotion flyers and adhesive labels.

- The FLUOSMART® inks may also be used as security inks because their fluorescent effect is not reproducible on a colour photocopier.
- These inks have been formulated, in a manner, so as to optimise their printability. Their behaviour on the press, the stability and transfer make it very easy to print.
- The quality of the pigments used enables the amount of ink deposited to be limited and, in this way, avoids the difficulties associated with printing excess ink.
- Cleaning does not present any difficulties

TECHNICAL SERVICE is available to help optimise the fluorescent appearance and the performance on the press of all inks in this FLUOSMART® range: contact@radior.fr
SCRATCH OFF INKS

RADIOR France offers scratch off inks designed for the printing of cards for direct mail, scratch off labels, lottery tickets, telephone cards...These scratch off inks provide a high level of concealment. Printed over a release varnish on appropriate substrates, they scratch off very easily and cleanly.

These scratch off inks are available for the following printing processes:

- **WATERBASED FLEXOGRAPHY**
  Gold, Silver, Black, White.
  Packaging: 5 kg jerrican
- **SOLVENT BASED FLEXOGRAPHY**
  Gold, Silver, Black, White.
  Packaging: 25 kg drum
- **UV FLEXOGRAPHY**
  Gold, Silver, Black.
  Packaging: 5 kg pail
- **SOLVENT BASED SCREEN**
  Gold, Silver.
  Packaging: 25 kg drum
- **UV SCREEN**
  Gold, Silver.
  Packaging: 5 kg pail

RELEASE VARNISHES

In the great majority of cases, it is preferable to print a sealer varnish (also referred to as a release varnish) in order to seal the substrate and to render the surface very smooth; this will ensure that a good scratch is easily obtained.

The release varnishes are available for the following printing processes:

- **WATERBASED FLEXOGRAPHY**
  Packaging: 5 kg jerrican or 25 kg drum
- **UV FLEXOGRAPHY**
  Packaging: 5 kg pail
- **UV SCREEN**
  Packaging: 5 kg pail
- **DRY UV OFFSET**
  Packaging: 2,5 kg pail
- **UV LETTERPRESS**
  Packaging: 2,5 kg pail

COIN RUB

The coin rub 5524 ink is a matt white ink which, once printed, on the matt white substrate becomes invisible. When the print in white is rubbed with a coin, it becomes grey and therefore legible.

This ink is a printable in conventional offset. It is particularly suited to the printing of game cards but not necessarily of a high level of security. It can be used as an invisible authentication packaging tickets or official documents.

**Technical support**

The technical team of RADIOR will be happy to assist during the development of your projects in scratch off inks or coin rub inks in order to help you in your choice of equipment and machine settings. This work is always very specific because the quantity of ink transferred is relatively important (in order to mask correctly the text to be revealed). As a result, the printed text, screen or anilox, the curing equipment as well as the speed should be adjusted.