

EURAPID O3

Conventional printing inks for metal decoration

Characteristics

EURAPID O3 inks are new high concentrated offset and dry offset printing inks designed for printing on boards and containers on coated and uncoated sheet metals. These inks dry by oxidation. Drying time approx. 7 min at 170°C.

The ink series meet the technical requirements in terms of great flexibility and resistance to abrasion.

Technical data

Properties:

- High gloss
- High intensity
- High Light fastness at least 6 (DIN 16525)
- Temperature resistant until 180°C (10 min)
- Heat-sterilised at 131°C/30 min
- Fast drying (around 7min at 170°C)
- Resistant to overprint varnish
- Resistant to solvent (DIN 16524)
- Excellent adhesion
- Excellent scratch resistance
- Flexible ink lay down, good formability
- Deep drawable

Substrates

For coated and uncoated metals

Important!!!!

Before beginning of printing we recommend a test print, in order to test the desired characteristics of the finished product. Gladly we accomplish printing tests on your material for you.

Technical Service Center

Kindly note that we are ready at any time for competent technical application support on your site.

Kindly contact our technical service center for printing inks:

Ink-Service@Zeller-Gmelin.de

Tel: +49 7161 802 279

Packaging

Standard packaging: 2,5 kg Metal Containers

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Technische Information



Additives and wash up

Additives:

T111 Drying agent, addition 05, - 1,0%

Eurapid O3-X60001 Transparent white, highly transparent, for reducing color strength, tack and viscosity remain at a comparable level, unlimited addition

Eurapid O3-X60002 varnish, (for colored inks) improves the ink transfer, addition max. 10%

Eurapid O3-X60003 varnish (for opaque white and transparent white), improves the ink transfer, addition max. 10%

Hints

Any addition of any additive might change the overall characteristics of the cured ink.

Storage

Storage conditions:

The inks must be stored in dark conditions. The inks must not be exposed to direct light for prolonged periods. The most favorable temperature is about 20°C. As a general rule, the shelf life increases proportionally to the lowering of storage temperatures.

Hints:

- protect from frost

Guarantee:

If inks are stored correctly, we guarantee a shelf life of 6 months from date of delivery, as our supplier of raw materials guarantee this period to us. However, we can say from practical experience, when stored and used properly, the inks will in many cases perform perfectly for 1-2 years or often much longer.

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Product designation

Process inks: O3-S... high light fastness version

Pantone®: O3-P... high light fastness version
PMS basic inks

Special inks: O3-X...

Opaque White: O3-X55...

Hints for light fastness

Light fastness can change when mixing inks and at halftone printing.

Marking

Marking according to EWG-guide lines:

Our inks are classified according to EG guide lines EG-Richtlinien/GefStoffV.

Kindly ask for safety data sheet.

Technische Information

specialities
 COMMERCIALS
 Packagi
 LETTERPRESS
 UV printing ink and lacquer

Fastness Properties for Pantone® and Process inks						
Color shade	Item number	Light fastness	Spirit	Solvent mixture	Alkali	Color shade
Euroskala						
Gelb	O3-S1101	6-7	+	+	-	
Magenta	O3-S1201	6	+	+	+	
Cyan	O3-S1301	8	+	+	+	
Schwarz	O3-S1401	8	+	+	+	
Pantone®						
Yellow	O3-P100	7	+	+	-	
Yellow 012	O3-P101	7	+	+	-	
Orange 021	O3-P150	6	+	+	+	
Warm Red	O3-P200	6	+	+	+	
Red 032	O3-P201	6	+	+	+	
Rubine Red	O3-P202	6-7	+	+	+	
Rhodamine Red	O3-P203	6	+	+	+	
Purple	O3-P250	6-7	+	+	+	
Violet	O3-P251	6-7	+	+	+	
Reflex Blue	O3-P300	6-7	+	+	+	
Process Blue	O3-P301	8	+	+	+	
Blue 072	O3-P302	6-7	+	+	+	
Green	O3-P350	8	+	+	+	
Black	O3-P400	8	+	+	+	

The colors shown are only for illustration and are not a binding color sample

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Product declaration

EURAPID printing inks, including additives

EURAPID inks for metal decoration are suitable for printing of tin plates and aluminium tubes by offset or dry offset printing. EURAPID inks for metal decoration can be classified under the generic term "oil based ink". These inks dry by oxidation. The drying time can be shortened with the application of an IR source.

The mineral oils used for EURAPID inks for metal are not regulated by the current version by April 1997 of the 4th order of objects of consumption. According to the present valid guidelines for the restriction of VOC emissions by the EU commission the in above mentioned printing inks are vegetable oil based which are not classified as VOC and are no subject to any regulation.

We only use a careful selection of raw materials under the terms of the CEPE "Rohstoff-Ausschlußliste für Druckfarben" which provide the best possible characteristics alongside security at the workplace according to the latest available technology. This excludes the application of the following materials in our printing inks: cancer producing materials, genetic changing materials, reproducing endangering materials and toxic materials.

The mentioned materials listed in the regulation 67/548 EWG (changed by the regulation 2006/121/EG) and in 76/769/EWG are **not part of our printing inks!**

Our printing inks adhere to all regulations and limits as described by CONEG, i.e. CONEG limit of 100 ppm as sum value for total content of four heavy metals lead, cadmium, mercury, chromium VI, is not only met but also shortened as several spot-tests prove. Also the boundary values of the DIN EN71-3 regulations regarding the "security of toys" are also fulfilled.

For primary packaging, the following is valid:

Providing the professional handling of our printing inks and a design of the foods packaging in such a way that direct contact of the printing ink with the filling will never take place, we can herewith declare that our printing inks are suitable for regulations EU guide line 1935 / 2004. Furthermore we would like to call your attention to the fact that printing speed, ink layer, substrate etc. effect the packaging among other things.

As Zeller+Gmelin do not effect the production of packaging, the manufacturer of packaging has to produce in accordance to the EU guide line 1935 / 2004. Furthermore the producer of consumer goods has to prove that with Zeller+Gmelin inks and with the production terms of manufacturer, the EU guide line 1935 / 2004 is achieved.

We would like to draw your attention to the fact that according to current law, the producer and not the supplier is responsible for his products to fulfil all legal requirements.

Please note all announcements of „Verband der Deutschen Druckfarbenindustrie“ to the subject „printing inks for food packaging“.

In addition we herewith confirm that our printing inks comply with the following EC directives: 2002/16/EG, 2002/95/EG.

Zeller+Gmelin GmbH & Co. KG

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Heavy Metals

CONEG stands for Coalition of North-Eastern Governors in the USA . One of their legislations, adopted by 18 states as of 1998, requires reductions in the amount of four heavy metals (specifically, mercury, lead, cadmium, and hexavalent chromium) in packaging and packaging components sold or distributed in their member states. For Zeller+Gmelin printing inks the limits for heavy metals as listed in the CONEG-Regulation (USA) are met.

The Euro Norm 71.3 refers to the max level of heavy metals in childrens toys. For Zeller+Gmelin printing inks the limits for heavy metals as listed in the EN 71.3 are met.

Heavy metals are no part of our formulations.

Hazardous substances

Substances mentioned in the **Directive 95/2002** (RoHS) are not intentionally used in our formulations / printing inks.

SVHC-substances (substances of very high concern). In our products no substances are used which meet the criteria of SVHC-substances (substances of very high concern). SVHC-substances are substances which are classified as CMR 1 & 2, PBT (PBT pollutants are chemicals that are toxic, persist in the environment and bioaccumulate in food chains), vPvB (Substances that are potentially very persistent and very bioaccumulative) und endocrine disruptors (artificial hormones).

ISO 9001

The production site of Zeller+Gmelin / Germany is certified according to DIN EN ISO 9001:2000 and DIN EN ISO 14001:2005 (corresponds to EN ISO 14001 edition Nov. 2004).

Please note:

The manufacturer of the finished article and the filler have the legal responsibility to ensure that it is fit for its intended purpose.

There are many types of final package and the printing ink is only one constituent. Since the parameters in the printing, packing and storage processes are not under the control of the printing ink manufacturer, the printing ink suppliers are not able to issue certificates or declarations of compliance which cover the legal responsibility of the entire packaging chain Text fom EuPIA-PIFOOD May 2007)

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