

A COMPREHENSIVE AND CROWD-SOURCED

LIST OF IRON-GALL-BASED FOUNTAIN PEN INKS

COMPILED BY T. MEDEIROS

V1.13. LAST UPDATED ON April 3rd, 2025



What are Iron-gall inks

Iron-gall inks have been used for centuries - Pliny the Elder (23 -79 AD) mentions its components in his *Naturalis Historia*. These inks are produced by the reaction of tannic acid extracted from [galls, a type of growth on trees](#) (especially oak), with ferrous sulphate (FeSO_4). Iron Gall inks darken over time as a result of oxidation of the iron content. As the ink dries, the ferrous sulfate is converted to ferric oxide (Fe_2O_3), which is intensely black. Iron-gall inks have generally good water-resistance.

Safety

Modern iron-gall inks are much safer to use on fountain pens compared to vintage inks, due to the improved chemical formulation and improvements in metallurgy of pen nibs. Iron-gall inks do not contain any suspended solids (as is the case of pigmented inks). There is vast literature and discussion on iron-gall safety for fountain pens, and while this is not the goal of this article, I will transcribe some words from [an article](#) from Dr. Konrad Żurawski:

*"**The same reactions** which are responsible for darkening and formation of insoluble in water complexes of iron **are also unfortunately possible in the interior of fountain pen**. This can happen in case if fountain pen is left unused for long time or if fountain pen has large tendency to fast drying out. Cleaning dried Iron Gall ink is not especially difficult, but it requires a lot of time and patience (especially if you can not or do not want to disassemble the pen). Iron Gall inks should be used in fountain pens that we use regularly." (emphasis added).*

While seemingly obvious, the knowledge that the same reactions witnessed on paper are possible inside of our pens is actually quite powerful and vital for the understanding of iron-gall ink behavior and maintenance.

How to identify iron-gall ink

Behavior

Darkening through oxidation after being laid on a page is a good indicative of an iron-gall-based ink. Iron-galls are relatively dry, low-lubricating inks, which make them fast to dry on paper. These properties are obviously not a definitive test, but they denote iron-gall formulation.

Labeling

Even though some labels on iron-gall inks do not disclose the content, many others will allude to the formulation in their packaging. Terms to look for: *iron-gall*, *ferrogallic*, *inchiostro ferrogallico* (Italian), *encre ferrogalique* (French), *eisen-gallus* (German), *IJzer-Galnoten* (Dutch), 铁胆墨水 (Chinese), 没食子インク (Japanese).

Chemical test

If one has access to a basic chemistry lab, there is an interesting test which can be performed on a sample of ink to determine whether is there any iron-gall content:

"If you add either ferricyanide, $[\text{Fe(III)(CN)}_6]^{3-}$, to an iron(II) salt or ferrocyanide, $[\text{Fe(II)(CN)}_6]^{4-}$, to an iron(III) salt, you get the deep blue mixed-valance Fe(II)/Fe(III) salt,

Fe₄[Fe(CN)₆]₃ , aka Prussian Blue. Thus, ferricyanide can be used as a test for iron(II) and ferrocyanide as a test for iron(III)."¹

LIST OF IRON-GALL FOUNTAIN PEN INKS (v.1.12)

Discontinued Formulations

These are older versions of inks, No longer available. Some have been replaced by a new formulation without any iron-gall content. Dates provided are approximate.

Chesterfield Archival Vault (ceased mfg. circa 2016, Likely made by Diamine)

Lamy Blue Black (until~2012)²

Montblanc Blue Black (50-ml shoe Ident.-No. 12574, until ~2010)

Montblanc Midnight Blue (60-ml bottle Ident. 105194 from ~2010 until~2013)

Pharmacist³ Blue-Black

Pharmacist Darkening Absinthe

Pharmacist Oriens-Occidens

Pharmacist Purpura Imperialis

Pharmacist Terra Incinerata

Pharmacist Turkish Night

Pharmacist Urkundentinte Document Ink

Pharmacist Vanadium

Rohrer & Klingner Ebony Limited Edition⁴

¹ An amazing contribution from user MarkTrain on an FPN thread:

<http://www.fountainpennetwork.com/forum/topic/252423-is-there-a-listing-of-all-iron-gall-inks/>

²Confirmed by a Lamy spokesperson in response to emails by FPN users: *"Thank you for your email and your interest in Lamy inks.*

Due to production standardization and needs of reducing the programme complexity we decided to standardize the formula of the blue-black ink to the one of the LAMY T10 cartridges.

Which means, that we will discontinue the iron gall content.

Mit freundlichen Grüßen / Kind regards

C. Josef Lamy GmbH

ppa.

Marco Achenbach

Leiter Produktmanagement/Entwicklung"

³ Pharmacist is a user at the Fountain Pen Network message board, who offered handmade iron-gall formulas online circa 2013. He hasn't been on the message board since 2019, thus these inks are considered discontinued for the time being.

⁴ Rohrer & Klingner Ebony is a limited edition iron gall ink released in 2023. As of April 2025, it is still available from some retailers, but no longer manufactured.

Currently available formulations

Akkerman No. 10, IJzer-Galnoten bl/zw (allegedly made by Diamine)

Büroservice Bergmann Eisengallustinte Blaufließend⁵

Büroservice Bergmann Eisengallustinte Rotfließend

Diamine Registrar's Ink

ESSRI - Ecclesiastical Stationery Supplies Registrars Ink

Gutenberg Urkundentinte G 10⁶

Gutenberg-shop Bibeltinte⁷

Hero 232 Blue - Black

KWZ Iron Gall Blue #1

KWZ Iron Gall Blue #2

KWZ Iron Gall Blue #3

KWZ Iron Gall Blue #4

KWZ Iron Gall Blue #5

KWZ Iron Gall Blue #6

KWZ Iron Gall Blue-Black

KWZ Iron Gall Turquoise

KWZ Iron Gall Green #1

KWZ Iron Gall Green #2

KWZ Iron Gall Green #3

KWZ Iron Gall Green #4

KWZ Iron Gall Green Gold

KWZ Iron Gall Gold

KWZ Iron Gall Mandarin

⁵ These appear to be only available at [Büroservice Bergmann's Kalligraphie-Shop website](#). Thanks to Babak and Nick for the tip (Aug. 2023). Website is unavailable in April 2025, so availability status is unknown.

⁶ Available in [30ml and 1-liter \(!\) bottles](#).

⁷ Claimed to be "piston-filler compatible". Available exclusively at the [Gutenberg Museum shop](#). They have other Iron-gall offerings in their *Naturfarbtinte* line, but they are not suitable for use with fountain pens. Thanks to Babak from Montreal for the tip (Oct. 2020).

KWZ Iron Gall Orange
KWZ Iron Gall Grapefruit
KWZ Iron Gall Red
KWZ Iron Gall Cherry
KWZ Iron Gall Red #3
KWZ Iron Gall Violet #2
KWZ Iron Gall Violet #3
Krishna Kot Massi Series Lavender Black
Krishna Kot Massi Series Orange Honey
Krishna Kot Massi Series Permanent Blue Black
Organics Studio Masters of Science Aristotle
Platinum Blue-Black⁸
Platinum Classic Ink Cassis black
Platinum Classic Ink Lavender Black
Platinum Classic Ink Forest Black
Platinum Classic Ink Citrus black
Platinum Classic Ink Khaki Black
Platinum Classic Ink Sepia Black
Pelikan 4001 Blue-Black⁹
Rohrer und Klingner Salix
Rohrer und Klingner Scabiosa
Rohrer und Klingner Iron Gall Ebony (2023 Limited Edition)
Stipula Ferrogallico Nero Miseria (Black)

⁸Confirmed by the company at http://www.platinum-pen.co.jp/e_about_ink.html . They state:
"Many decades ago, we could not develop pigment ink for fountain pens. So we mixed ferrous tannic acid and blue dye-based ink to make ferric tannic acid, so to say "Blue Black" colored ink. I will skip boring details, but we compounded blue dyes together with ferrous tannic acid, and this Blue Black ink is became oxidized in the air after writing and become ferric. Hence, its color turns blue after writing. However, the blue dye color will gradually fades away and only the ferrous iron remains on the paper permanently."

⁹ Confirmed by Pelikan through [a document entitled "Does Pelikan offer document proof ink that doesn't fade with time?"](#)

Stipula Ferrogallico Seppia del Tirreno (Brown)
Stipula Ferrogallico Blu Napoleonico (Blue)
Stipula Ferrogallico Rosso Impruneta (Red)
Tianjin Ostrich 223
Tianjin Ostrich 313
Tianjin Ostrich 553
Tianjin Ostrich 903¹⁰
Tintenlabor ¹¹Eisengallustinte 1, violettblau / schwarz
Tintenlabor Eisengallustinte 1, dunkelgrün / schwarz
Tintenlabor Eisengallustinte 2, dunkelblau / schwarz
Tintenlabor Eisengallustinte 2, dunkelgrün / schwarz
Tintenlabor Eisengallustinte 2, purpur / schwarz
Tintenlabor Eisengallustinte 3, dunkelblau / schwarz
Tintenlabor Sondertinte: Eisengallustinte 1, purpur / schwarz
Tintenlabor Eisengallus Goldtinte, gold / schwarz
Tintenlabor azur noir, dunkelblau / schwarz
Tintenlabor Alpennebel / hellgrau
TWSBI Blue-Black¹²

Permanent Inks that are NOT Iron-Galls

Montblanc Permanent Ink Blue (Pigmented Ink) ¹³

¹⁰ Confirmed by the company in an email to reader Brian Minsk: *"It's still iron gall but the formulation changed a lot, so the behave is not act like iron gall. Especially water proof. But after the time changing the color will still become darker and darker ... You can regard it as a mixture."* Brian has reviewed these Chinese-market inks (Aug.2022) .

¹¹ This is a new (as of early 2025) manufacturer based in Switzerland, offering a selection of iron-gall only inks. The inks are divided by iron content level, which is displayed on the labels in grams per liter! Thanks to readers Babak, Jean and Alex for the tip.

¹² This was confirmed by TWSBI in a personal email to myself, [available here](#). Funny thing, they initially denied it before admitting it a day later! They explained: *"...the blue- black is actually a modern variation of iron gall ink."* Thanks Jason for the tip!

¹³ This was confirmed from Montblanc in a personal email to myself, [available here](#). They explain: *"According to our ink specialist, the permanent ink no longer have an Iron-Gall content and we have changed to a new ink with black or blue solid pigments. With these pigments, the ink corresponds to ISO 14145-2 (documentary use)."*

Montblanc Permanent Ink Black (Pigmented Ink, see note 6)

Noodler's Inks¹⁴

Pelikan Fount India (Pigmented Ink, see note 4)

Pilot Blue-Black¹⁵

Platinum Carbon Black (Pigmented Ink)

Platinum Chou-Kuro (Pigmented, cellulose-bonding, mineral-reacting ink)

Rohrer und Klingner Permanent Blue (Despite the name, this ink is not permanent at all)

Sailor Nano Sei-Boku (Pigmented Ink)

Sailor Nano Kiwa-Guro (Pigmented Ink)

Thanks and Contributions

This list would never be published without the help of FPN User and moderator lapis, which compiled a preliminary list on a 2013 discussion thread. Also thanks to Sakura Tohma from West Dean College School of Conservation for the [elucidative primer](#) on Iron-Gall inks and for the actual gall-nut picture in the header.

Dr. Konrad Żurawski, a Ph.D student of the Faculty of Chemistry, Warsaw University of Technology and founder of KWZ Inks has published [excellent texts](#) on Iron-Gall inks and how to properly care for pens using this kind of inks.

Finally, to all readers who have reached out for new IG ink info!

If you hear about a new iron-gall ink, find any inconsistencies or have more information for this list, please [send me an email](#). This list will be updated whenever I take notice of a new Iron-Gall ink.

¹⁴ Noodler's founder and operator Nathan Tardif has stated that he does not and never will manufacture iron-gall inks in an interview for Goulet's Ink Nouveau, available here: http://blog.gouletpens.com/2011/10/special-write-time-with-nathan-tardif_13

¹⁵ This was confirmed by Pilot in a personal email to myself, on July 16th 2025, [available here](#).



LIST OF IRON-GALL-BASED FOUNTAIN PEN INKS © by Thiago Medeiros, 2017-2023.

LIST OF IRON-GALL-BASED FOUNTAIN PEN INKS is licensed under a Creative Commons Attribution-NonCommercial 3.0 Unported License. This license allows anyone to remix, tweak, and build upon this work non-commercially, with proper credit.