Medieval Manuscripts
INK & PIGMENT SAMPLER
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This ink and pigment sampler was compiled by the Special Collections Conservation Unit of the Preservation Department of Yale University Library. If you have any comments or questions please email the paper conservator at: marie-france.lemay@yale.edu.
This pigment sampler set contains samples of pigments most commonly used in illuminated manuscripts.

When using the pigment sampler set, please handle the boards with care. Always interleave boards with the silicon sheets provided; this helps avoid abrasion of the painted pigment samples.

Please note that the recipe number next to certain pigment samples refers to the numbers found in the ink and pigment recipe booklet which accompanies this sampler set.
Blues
mineral

AZURITE
Basic copper sulfate
Blue malachite
Mountain blue
German blue
Lapis armenius (Pliny)
Azurium citramarinum

LAPIS LAZULI
Lazurite
Ultramarine (natural)
Azurum ultramarinum
Azurum transmarinum
Persian blue

LAPIS LAZULI

SMALT
Azure blue
Saxon blue
Blue sand
Starch blue
**Blues**

**organic**

**INDIGO**
Indicum (Pliny)
India blue

**WOAD**
Glastum
Gaudus herba
Dyer's woad
Pastel

**FOLIUM**
Turnsole
Chrozophora tinctoria
Dyer's croton
DUE TO PIGMENT’S POTENTIAL TOXICITY, WE ARE UNABLE TO INCLUDE A SAMPLE IN THE KIT.

MINIUM
Red lead
Orange lead
Lead oxide red
Saturn red
Lead tetroxide

CINNABAR
Mercuric sulfide
Vermilion (synthetic)
English Vermilion

RED LEAD, MINIUM (KREMER PIGMENTS 42500)

CINNABAR, MONTE AMIATA, ITALY (KREMER PIGMENTS 10610)

CINNABAR FINE, CHINA (KREMER PIGMENTS 10625)
Reds mineral

**RED OCHRE**

- Red iron oxide
- Indian red
- Venetian red
- Spanish red
- Red chalk
- Bole

**BURGUNDY RED OCHRE DEEP, FRANCE (KREMER PIGMENTS 11577)**

**RED OCHRE**

**RED IRON OXIDE, NATURAL, HEMATITE (KREMER PIGMENTS 48600)**

**RED OCHRE**

**SPANISH RED OCHRE, CASTILLE (KREMER PIGMENTS 11584)**

**RED BOLE**

- Bole
- Bolus
- Armenian bole

**RED BOLE, NATURAL RED EARTH FROM GERMANY (KREMER PIGMENTS 40503)**
MADDER ROOT

KREMER PIGMENTS 37199 (PIECES)
KREMER PIGMENTS 37201 (GROUND)

MADDER LAKE
Rubia tinctorium
Rose madder
Garancine
Dyer's root

KREMER PIGMENTS 37202
RECIPE M-1
37202 M-1

BRAZILWOOD
Bresilwood
Bresill
Pernambucco wood
Verzino

KREMER PIGMENTS 36150 (PIECES)
CLOTHLET RECIPE B-1

BRAZILWOOD LAKE
RECIPE B-2
RECIPE B-3
B-2 B-3
COCHINEAL INSECTS
Coccus cacti

Carmine
Crimson lake
Grana
Scarlet lake
Purple lake

DRAGON’S BLOOD
Sanguis darconis
**Purples organic**

**FOLIUM**
- Turnsole
- Chrozophora tinctoria
- Dyer's croton

**COCHINEAL LAKE**
- Carmine
- Crimson lake
- Grana
- Scarlet lake
- Purple lake

**TYRIAN PURPLE**
- Imperial purple
- Murex purple
- Purpurissum
- Whelk red

Due to pigment's prohibitive cost, we are unable to include a sample in the kit.
GREEN
BUCKTHORN
BERRIES
Dyer’s buckthorn
Rhamnus
French, Avignon or
Persian berries

YELLOW LAKE
Stil de grain
Dutch pink
French pink
Made from green buckthorn berries

WELD LAKE
Reseda Luteola (plant)
Gualda (plant)
Gaude yellow
Italian pink
Laque de Gaudes

SAFFRON
Crocus sativus L. (plant)
Due to pigment's potential toxicity, we are unable to include a sample in the kit.

ORPIMENT
Arsenic trisulfide
Arsenic yellow
King's yellow
Auripigmentum
Arsenikon
Arzicon (arsicon)

YELLOW OCHRE
Yellow earth
Gold ochre
French ochre
Goethite

RAW SIENNA
Italian earth
Greens
mineral

**MALACHITE**
- Basic copper carbonate
- Mountain green
- Hungarian green
- Green Bice
- Iris green

**GREEN EARTH**
- Terre verte
- Creta viridis
- Celadon green
- Verona earth

**VERDIGRIS**
- Basic copper acetate
- Copper green
- Aerugo
- Viride aeris
- Spanish green
RIPE BUCKTHORN BERRIES
Dyer's buckthorn
Rhamnus
French, Avignon or Persian berries

SAP GREEN
Bladder green
Vert de vessie
Made from ripe buckthorn berries
BURNT SIENNA
Italian earth
Burnt ochre

BURNT SIENNA NO. 3, DARK, ITALY (KREMER PIGMENTS 40430)

RAW UMBER
Umber earth
Umbræ
Cyprus umber
Turkish umber

RAW UMBER, GREENISH, ITALY (KREMER PIGMENTS 40612)

BURNT UMBER

BURNT UMBER, FROM CYPRUS (KREMER PIGMENTS 40710)

BROWN OCHRE

BROWN OCHRE, LIGHT WARM BROWN, GERMAN (KREMER PIGMENTS 40231)
LAMP BLACK
Furnace black
Carbon black
Soot black

VINE BLACK
Charcoal black
Yeast black
Grape black

PEACH BLACK
Peachstone black
Kernel black
Vegetable black
Fruit stone black
LEAD WHITE
Basic lead carbonate
White lead
Ceruse
Silver white

CHALK
Calcium carbonate
Whiting
Calcite

The source for calcium white is often ground egg shells.

GYPSUM
Calcium sulfate
Alabaster
Terra alba
Gesso

BONE WHITE
Calcined bone
Bone ash

DUE TO PIGMENT’S POTENTIAL TOXICITY, WE ARE UNABLE TO INCLUDE A SAMPLE IN THE KIT.
Irongall Ink

**basic components**

**GALL NUTS**
- Oak apples
- Oak gall nuts
- Aleppo gall

**IRON (II) SULFATE**
- Ferrous sulfate
- Copperas
- Green copperas
- Green vitriol
- Iron vitriol

**GUM ARABIC**
- Gum acacia
- Senegal gum

**ADDITIVES**
- Logwood - Lampblack - Indigo
- Honey

Wine (red or white), beer and vinegar were also frequently used with or in lieu of water to macerate gall nuts. Irongall inks including carbon as an additive are sometimes referred to as ‘mixed’ inks.
Carbon Black Ink

basic components

LAMP BLACK
- Furnace black
- Carbon black
- Soot black

GUM ARABIC
- Gum acacia
- Senegal gum