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Historical recipes for preparatory layers for oil paintings in manuals, manuscripts and handbooks in North West Europe, 1550-1900: analysis and reconstructions

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Appendix 13 Ground colours mentioned in recipes 1550-1900, North West Europea and South Europe

Note: if information regarding the binding medium or the ground colour appears between square brackets, this information does not appear in the recipe text but is an interpretation by the author, based on pigmentation mentioned in the recipe text.

13a Panel ground colour

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--------------------------------------|---------------------------------|----------------|--|-----------------------|----------------------|
| Vasari 1550 (1568): 52 | Italy | panel | lead white, massicot, 'terra da campana' | nut oil | [flesh] |
| Van Mander 1604: 47v, 48r | Netherlands | panel | - | [oil] | flesh colour |
| De Mayerne 1620-44: 11 | England | panel | lead white, umber | [oil] | [warm grey or drab] |
| De Mayerne 1620-44: 90v | England | panel | ceruse, umber | oil | [warm grey or drab] |
| Bate 1633 (1654): 167 ⁷⁹³ | England | panel | lead white | oil | white |
| Norgate 1649 ⁷⁹⁴ | England | panel | lead white | oil | white |
| Pacheco 1649: 382-3 | Spain | panel | lead white, Italian umber | Linseed oil | [warm grey or drab] |
| King 1653-7: 52, 52v | England | panel | ceruse, charcoal black, very little red lead | [oil] | [grey] |
| 'Art of painting in oyle' 1664: 94-5 | England | panel | lead white, minium, Spanish brown, umber, (lamp black) | Linseed oil | [greyish brown] |
| Salmon 1672: 141 | England | canvas panel | lead white | oil | white |
| De la Fontaine 1679: 27-8 | France | panel | Spanish white | glue | white |
| De la Fontaine 1679: 27-8 | France | panel | - | - | grey |
| De Piles 1684: 64-5 | France | panel canvas | | - | white |
| Beurs 1692: 19-20 | Netherlands | panel | lead white, black | oil | grey |
| Beurs 1692: 19-20 | Netherlands | panel | lead white, umber | oil | [warm grey or drab] |
| De la Hire 1730: | France | panel | lead white or ceruse, | [oil] | [warm grey] |

⁷⁹³ Transcript of 1633 edition by (Talley 1981: 172) checked against 1654 edition.

⁷⁹⁴ Transcription Hardie 1919: 91

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|---|------------------|---|---|----------------------|
| 708- 710 | | canvas copper | little brown red, little carbon black | | |
| Mss. Hist. Helv. XVII 234 1750- 1800: 85-6 ⁷⁹⁵ | Switzerland | panel | brown red | oil | brown red |
| Pernety 1756: lxxxviii | France | panel | lead white, little brown red and carbon black | [oil] | reddish grey |
| Dossie 1758: 203- 4 | England | panel | lead white | oil | white |
| Dossie 1758: 203- 4 | England | panel | lead white, ochre | Hot drying oil | yellow |
| Dossie 1758: 203- 4 | England | panel | lead white or flake white | [oil] | white |
| Hallen 1761: 321- 2 | Germany | panel | flake white, brown- red, charcoal black | oil | warm grey |
| Jombert 1766: 135-6 | France | panel | lead white, brown red, carbon black | oil | warm grey |
| <i>Valuable secrets</i> 1775: 133 | England | panel | whiting | glue, covered with boiling oil | whitish |
| <i>Nieuwen verlichter</i> 1777: 170 | Netherlands | panel | lead white, brown red, carbon black | [oil] | warm grey |
| Pileur d'Aligny 1779: 72 | France | panel | white | glue | white |
| Dutens 1779: 62 | France | panel | lead white, you may add brown red | oil | white pinkish |
| Monton 1792: 42 | Spain | panel | ochre | oil | yellow |
| Van Leen c. 1800: 18 | Netherlands | panel | calcined lead white | boiled oil, turpentine oil, turpentine balsam | whitish |
| <i>Compendium</i> 1801: 215-6 | England | canvas panel | jess [gesso] | size | white |
| Ibbetson 1803: 11-2 | England | panel | lead white | dpirits of turpentine, drying oil | white |
| Fokke Simonsz 1803-4: 84-5 | Netherlands | panel | chalk | glue | white |
| Smith 1825: 357- 8 | France | panel | burnt bone ashes | wheat flour paste | whitish |

⁷⁹⁵ Transcribed in Stettler 1987.

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|---|---------------------------|---|--|----------------------------------|
| Hayter 1825: 293-4 ⁷⁹⁶ | England | canvas panel | [unspecified] | gum Arabic, gum mastic, wax | grey |
| Boutard 1826: 36 | France | canvas panel copper | - | - | light grey |
| Boutard 1826: 36 | France | canvas panel copper | - | - | brown red |
| Bouvier 1827: 571-2 | France | all supports | lead white, yellow ochre, little clear red nr. 7 | nut oil | light orangy gold |
| Bouvier 1828: 423-4 | Germany | all supports | lead white, yellow ochre, bright red ochre nr. 7 | nut oil | bright, gold, little orangy |
| Vergnaud 1831: 119 | France | all supports | lead white | oil | white |
| Fernbach 1834: 5-7 | Germany | panel | lead white, Mannheim chalk | amber varnish, turpentine oil | white |
| Fielding 1839: 79- 80 | England | panel | calcined ground sheeps trotter bones, artists (colours) | wheat flour, water | white [unspecified colour] |
| Fielding 1839: 81- 2 | England | panel | lead white | drying oil, spirits of turpentine | white |
| Fielding 1839: 82 | England | panel | chalk or plaster or whiting | size | white |
| Cawse 1840: 20- 1, 28 | England | canvas panel | whiting, Paris plaster (colour) | size | white [unspecified colour] |
| Cawse 1840: 21 | England | canvas panel | tobacco pipe clay, Spanish white (colour) | water, drying oil | white [unspecified colour] |
| Cawse 1840: 21 | England | panel | lead white | [oil] | white |
| 'Omnim Gathm No 4' 1844-6 (recipe date 1844): 04P016L04 | England | panel | Grecian powder, lead white | turpentine, anime varnish, siccatives | white |
| Hampel 1847: 26 | Germany | panel | lead white, ochre | oil varnish | [cream] |
| Hundertpfund 1849: 105-9 | England | vanvas panel | lead white ⁷⁹⁷ | oil | [white] |

⁷⁹⁶ The colour of this ground appears in a section that describes the so-called 'Grecian method' of painting, a wax painting method which is different from standard oil painting. See Carlyle 1991, vol. 1: 167-8 or Carlyle 2001: 117-8 for more information Hayter's sources for and descriptions of this method.

⁷⁹⁷ A layer of flour is spinkled on while the lead white/oil layer is still tacky

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--|---------------------------------|--------------------------------|---|--|---------------------------|
| Blockx 1881: 4 | Belgium | canvas panel | - | - | white |
| <i>Technische Mitteilungen</i> , nr 25 (1886): 39 | Germany | canvas panel | slaked chalk, white bole or china clay | Cologne glue or rabbitskin glue, with shellac sealing layer on top | [light orange] |
| Raycroft et al. 1888: 23-4 | England | canvas panel board paper | - | - | light grey [white] |
| Vibert 1892: 184 | England | panel | lead white | painting varnish, little siccativ | white |
| Vibert 1892: 186-8, 108 | England | canvas panel board | zinc white | casein paste | white |
| Oughton 1892: 36 | England | panel | flake white, little bright red | [oil] | [pinkish] [warm white] |
| <i>Technische Mitteilungen</i> , nr 20 (1895): 1-2 | Germany | canvas panel | chalk ground | glue, with boiled linseed oil sealing layer | [cream] |

13b Canvas ground colour

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--|---------------------------------|----------------|---|--------------------------|-----------------------|
| Vasari 1550 (1568): 52 | Italy | canvas | lead white, massicot, 'terra da campana' | nut oil | [flesh colour] |
| Vasari 1550 (1568): 52 | Italy | canvas | lead white | flour paste with nut oil | [cream] |
| Borghini 1584 (1730): 138 | Italy | canvas | Volterra gypsum | flour paste, glue, oil | [cream] |
| 'Reglas para pintar' c. 1575-1600: 1-1v ⁷⁹⁸ | Spain | canvas | lead white, minium, black | oil | [warm grey] |
| Ms. Fr 640 1580-1600: perso 8 | France | canvas | ceruse, yellow ochre, little massicot | [oil] | [cream, light yellow] |
| Ms. Fr 640 1580-1600: 57 perso 115 | France | canvas | ashes | Oil | [grey] |
| Armenini 1587: 124-5 | Italy | canvas | lead white, massicot, terra di campana | common varnish | [flesh colour] |

⁷⁹⁸ Transcription by Bruquetas-Galán 1998: 37

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|----------------|---|---------------------------|--|
| Armenini 1587: 124-5 | Italy | canvas | verdigris, lead white, umber | common varnish | [warm grey] |
| De Mayerne 1620-44: 5 | England | canvas | lead white, charcoal black, umber | oil | [warm grey] |
| De Mayerne 1620-44: 11 | England | canvas | lead white, umber (a little) | [oil] | [warm grey or drab] |
| De Mayerne 1620-44: 20v | England | canvas | lead white, ochre, black | [oil] | [warm grey] |
| De Mayerne 1620-44: 28v | England | canvas | ochre | walnut oil, litharge | [ochre] |
| De Mayerne 1620-44: 90 | England | canvas | ceruse, umber | [oil] | [warm grey or drab] |
| De Mayerne 1620-44: 98v | England | canvas | lead white, carbon black | [oil] | [grey] |
| De Mayerne 1620-44: 85 | England | canvas | lead white, red ochre, little umber, very little charcoal black | [oil] | [blueish grey] |
| De Mayerne 1620-44: 87 | England | canvas | ceruse, umber or yellow ochre or red burnt ochre | [oil] | [beige] [light orange] [warm grey] |
| De Mayerne 1620-44: 95 | England | canvas | lead white, smalt, lake (little) | [oil] | [purplish grey] |
| De Mayerne 1620-44: 96 | England | canvas | lead white, umber (little), smalt | [oil] | [blueish grey] |
| De Mayerne 1623-44: 78-9 | England | canvas | calcined bones, little ceruse or lead white, little massicot | [oil] | [whitish] |
| Manuscript Sloane 1990 c. 1623-44: 78-9 | England | canvas | lead white, minium | [oil] | [light orange] |
| Bate 1633 (1654): 167 ⁷⁹⁹ | England | canvas | lead white | oil | white |
| Lebrun 1635 ⁸⁰⁰ | France | canvas | potter's earth, yellow earth, ochre | linseed- or nutoil | [brown or ochre] |
| Pacheco 1649: 383-4 ⁸⁰¹ | Spain | canvas | red earth | oil | red |
| Pacheco 1649: 383-4 ⁸⁰² | Spain | canvas | lead white, minium, charcoal black | linseed oil | [warm grey] |
| Symonds 1650- 2: 10 | England Italy | canvas | red earth, lead white, chalk, carbon black | [oil] | [greyish red] |
| <i>Tractato</i> 1656 ⁸⁰³ | Spain | canvas | chalk from crushed shells | linseed oil | [cream] |

⁷⁹⁹ Transcript of 1633 edition by (Talley 1981: 172) checked against 1654 edition

⁸⁰⁰ Transcription Merrifield 1849 (1999): 772

⁸⁰¹ Translated by Véliz 1986: 68.

⁸⁰² Translated by Véliz 1986: 68.

⁸⁰³ Translated by Véliz 1986: 111

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|-----------------|--|--|--------------------------------------|
| Lana 1670: 158 | Italy | canvas | umber, little lead white, red earth | linseed oil | [brown] |
| Volpato c. 1670 ⁸⁰⁴ | Italy | canvas | terra da bocali, red earth, little umber | linseed oil | [red] |
| Salmon 1672: 141 | England | canvas panel | lead white | oil | white |
| Beale pocketbooks 1677, 1681: 56v ⁸⁰⁵ | England | canvas | - | - | reddish |
| Eikelenberg 1679-1704: 385 | Netherlands | canvas | umber, brown red, white, paint from pencil tray or pot | [oil] | 'not too dark' [greyish brown] |
| De Piles 1684: 64-5 | France | panel canvas | | - | white |
| Félibien 1676: 407-8 | France | canvas | brown red, lead white | nut or linseed oil | brown red |
| Félibien 1676: 407-8 | France | canvas | lead white, carbon black | nut or linseed oil | greyish |
| Beurs 1692: 17- 20 | Netherlands | canvas | umber, [lead white] | oil | [warm grey or drab] |
| Hidalgo 1693 ⁸⁰⁶ | Spain | canvas | almagra and umber or Fuller's earth, siccative | boiled linseed oil | [brown] |
| Dupuy du Grez 1699: 244-5 | France | canvas | - | - | white |
| Dupuy du Grez 1699: 243-4 | France | canvas | lead white, carbon black | [oil] | grey |
| Palomino 1715, 1724, vol. 2: 32- 3 | Spain | canvas | clay or marl (Fuller's earth), red earth, old colours, brown earth ⁸⁰⁷ | linseed oil | [warm brown] |
| Palomino 1715, 1724, vol. 2: 34- 5 | Spain | canvas | sifted ashes ⁸⁰⁸ | mixed with glue, impregnated with oil | [greyish] |
| Chambers 1728, vol 2: 735 ⁸⁰⁹ | England | canvas | lead white, charcoal black | [oil] | grey |
| Cröker 1729: 74- 7 | Germany | canvas | bole | varnish | [orange/red] |
| De la Hire 1730: 708- 710 | France | panel canvas | lead white or ceruse, little brown red, little | [oil] | [warm grey] |

⁸⁰⁴ Transcription Merrifield 1849 (1999): 731

⁸⁰⁵ Transcribed by Talley 1981: 287

⁸⁰⁶ Translated by Véliz 1986: 137

⁸⁰⁷ Translated by Véliz 1986: 150

⁸⁰⁸ Translated by Véliz 1986: 152

⁸⁰⁹ Recipe details taken from transcript by Kraft 2005

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|------------------|---|--------------------------------------|----------------------|
| | | copper | carbon black | | |
| Barrow 1735, vol 2: n.p. | England | canvas | white lead, charcoal black | [oil] | ash colour |
| Chomel 1743: 948 | Netherlands | canvas | lead white, charcoal black | [oil], little spike oil | grey |
| Mss.Hist.Helv.XV II 233 1750- 1800: 50 ⁸¹⁰ | Switzerland | canvas | brown red, lead white, chalk | oil | [brown] |
| Barrow 1754: n.p. | England | canvas copper | lead white, charcoal black | [oil] | grey |
| Pernety 1756: 295-6 | France | canvas | - | - | white |
| Smith 1756: 58 | England | canvas | lead white, little black | linseed oil | grey |
| Dossie 1758: 203 | England | canvas | white lead, [black] | oil | grey |
| École 1759: 173- 4 | France | canvas | lead white, carbon black | [oil] | grey |
| Hallen 1761: 322 | Germany | canvas | red bole | oil | orange/brown /red |
| Jombert 1766: 135-6 | France | panel | lead white, brown red, carbon black | oil | warm grey |
| Jombert 1766: 126-31 | France | canvas | lead white, brown red, carbon black | [oil] | warm grey |
| Chomel 1767: 869 | France | canvas | lead white, carbon black | [oil] | grey |
| Griselini and Fassadoni 1772: 269 | Italy | canvas | lead white, carbon black | [oil] | grey |
| Watin 1772: 190-1 | France | canvas | lead white, carbon black | half nut oil, half linseed oil | grey |
| <i>Valuable secrets</i> 1775: 133-5 | England | canvas | lead white, charcoal black | [oil] | grey |
| <i>Nieuwen verlichter</i> 1777: 170 | Netherlands | copper | lead white, brown red, carbon black | oil | warm grey |
| <i>Nieuwen verlichter</i> 1777: 167 | Netherlands | canvas | lead white, brown red, carbon black | [oil] | warm grey |
| Pileur d'Aligny 1779: 70 | France | canvas | lead white | [unspecified] , honey | white |
| Pileur d'Aligny 1779: 69-70 | France | canvas | lead white, carbon black | oil | grey |
| Dutens 1779: 52 | France | canvas paper | black, ochre, white, (brown red) | [oil] | warm grey |
| Pernety 1781: 08 | France | canvas | lead white, carbon | [oil] | grey |

⁸¹⁰ Transcribed in Lehmann 2002.

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|-----------------|---|--------------------------------------|----------------------|
| | | | black | | |
| <i>Artist's assistant</i> c. 1785: 93 | England | canvas | lead white, carbon black | drying oil, [spike oil?] | grey |
| <i>Encyclopedie méthodique</i> 1789: 145 | France | canvas | lead white, carbon black | half nut oil, half linseed oil | grey |
| <i>Golden cabinet</i> 1793: 112 | United States | canvas | chalk | size, little honey | white |
| <i>Golden cabinet</i> 1793: 112 | United States | canvas | lead white, carbon black | [oil] | grey |
| <i>Maler- og forylder handbok</i> n.d.: 70-1 | Denmark | canvas | pale white, coal black | linseed oil | [grey] |
| <i>Practical treatise</i> 1795: 207-8 | England | canvas | black of burned peach stones, [lead] white | [unspecified] | grey |
| <i>Practical treatise</i> 1795: 158 | England | canvas | brown ochre, white and light red | [unspecified] | tanned leather |
| <i>Praktisches Handbuch</i> 1795: 84-5 | Germany | canvas | lead white, carbon black | half nut oil, half linseed oil | grey |
| Krünitz 1799, vol 76: 623-5 | Germany | canvas | lead white, charcoal black | half nut oil, half linseed oil | grey |
| Sheldrake 1798: 297-8 | England | canvas | umber broken with red, yellow or blue, diluted with chalk or whiting | distemper | [brown] |
| <i>Secrets</i> 1801: 151-2 | France | canvas | lead white, carbon black | [oil] | grey |
| Simis 1801: 158 | Netherlands | canvas | light colour | [oil] | light colour |
| <i>Compendium</i> 1801: 215-6 | England | canvas panel | jess [gesso] | size | white |
| <i>Compendium</i> 1801: 216 | England | canvas | peach stone black, [lead] white | [Unspecified] | grey |
| Hodson and Dougall 1805: 244 | England | canvas | - | - | tanned leather |
| Sully 1809-71: 019 | United States | canvas | whiting | glue, oil | white |
| Sully 1809-71 (recipe date 1818): 066 | United States | canvas | whiting | [unspecified] | whitish |
| Sully 1809-71 (recipe date | United States | canvas | lead white | paste, oil, litharge | white |

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|---------------------------|---|-----------------------------------|-------------------------------|
| 1826): 036 | | | | | |
| Sully 1809-71 (recipe date 1828): 046 | United States | canvas | whiting | oil | white ⁸¹¹ |
| Sully 1809-71 (recipe date 1840): 106-7 | United States | canvas | whiting | size | white |
| Sully 1809-71 (recipe date 1849): 134-5 | United States | canvas | lead white | linseed oil, starch, water | white |
| Sully 1809-71 (recipe date 1855): 156 | United States | canvas | lead white | Skimmed milk | white |
| Sully 1809-71 (recipe date 1856): 156 | United States | canvas | lead white | [oil] | White |
| Sully 1809-71 (recipe date 1867): 176 | United States | canvas | lead white, pinch of vermilion | skimmed milk | whitish |
| Stöckel 1825: 181-3 | Germany | canvas | lead white, charcoal black | lightly boiled oil varnish | grey |
| Hayter 1825: 293-4 | England | canvas panel | [unspecified] | gum Arabic, gum mastic, wax | grey |
| Boutard 1826: 36 | France | canvas panel copper | - | - | light grey |
| Boutard 1826: 36 | France | canvas panel copper | - | - | brown red |
| Riffault 1826: 183-4 | France | canvas | lead white, carbon black | nut oil, linseed oil | grey |
| Bouvier 1827: 571-2 | France | all supports | lead white, yellow ochre, little clear red nr. 7 | nut oil | light orangy gold |
| Bouvier 1827: 571-2 | France | canvas | lead white with little vine black, or with little red ochre pinch of black, or with yellow ochre with little red ochre | [oil] | [grey warm grey orange] |
| Bouvier 1827: 577-80 | France | canvas | pipe clay, little red ochre, light yellow ochre | flour paste | [warm white light yellow] |
| <i>Artist &</i> | United | canvas | lead white, carbon | [oil] | grey |

⁸¹¹ Underneath this layer is a layer of yellow soap dissolved in water with either lamp black, yellow ochre or whiting ground in drying oil. It is possible that this layer would shimmer through, considering the possible colour difference.

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--|-------------------------------------|-----------------|--|-----------------------------------|----------------------------------|
| <i>tradesman's guide 1827: 38-9</i> | States | | black | | |
| Bouvier 1828: 423-4 | Germany | all supports | lead white, yellow ochre, bright red ochre nr. 7 | nut oil | bright, gold, little orangy |
| Bouvier 1828: 420-3 | Germany | canvas | lead white, vine black or other black | oil | ash |
| Bouvier 1828: 420-3 | Germany | canvas | lead white, red ochre with little black | oil | [warm grey] |
| Bouvier 1828: 420-3 | Germany | canvas | lead white, Yellow ochre, little red ochre | oil | [light orange] [light yellow] |
| Bouvier 1828: 428-30 | Germany | canvas | pipe clay, light yellow ochre, little red ochre | starch or fine flour, water | [warm white] [light yellow] |
| Montabert 1829: 158 | France | canvas | white | soft glue | white |
| Montabert 1829: 158-9 | France | canvas | ochre | oil | [yellow] |
| Montabert 1829: 158-9 | France | canvas | white | oil | white |
| Montabert 1829: 161-2 | France | canvas | [unspecified] | oil | grey |
| Vergnaud 1831: 119 | France | all supports | lead white | oil | white |
| Vergnaud 1831: 137-8 | France | canvas | lead white, carbon black | linseed oil, nut oil | grey |
| Arsenne and Denis 1833: 335- 7 | France | canvas | lead white, black, red ochre | [oil] | grey warm grey white |
| Bickes 1834: 133-4 | Germany | canvas | chalk | glue | white |
| Fernbach 1834: 4-5 | Germany | canvas | lead white, pipe clay (Mannheim clay) | oil boiled with bread | white |
| <i>Nyt magazin</i> 1838: 261-2 | Denmark | canvas | slaked chalk, lead white | | white |
| Sarsfield Taylor/Merimee 1839: 218-9 | England | canvas | ceruse | [oil] | white |
| Sarsfield Taylor/Merimee 1839: 220-1 | England | canvas | chalk | glue | white |
| Cawse 1840: 20- 1, 28 | England | canvas panel | whiting, Paris plaster (colour) | size | white [unspecified colour] |
| Cawse 1840: 21 | England | canvas panel | tobacco pipe clay, Spanish white (colour) | water, drying oil | white [unspecified colour] |

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--|-------------------------------------|---------------------|--|---|---------------------------|
| Roberson 1840: n.p. | England | canvas | dry white, lead white, Paris plaster | drying oil, goldsize, copal | [whitish] |
| Hampel 1846: 22-5 | Germany | canvas | lead white, ochre, black or lead white and dark ochre ⁸¹² | linseed oil varnish | light brown light grey |
| W&N recipe book 'P.07' 1847: 7PP239L01 | England | canvas | chalk, lead white, umber | glue size, treacle, linseed oil | [light] |
| Hundertpfund 1847: 130 | Germany | canvas | pipe clay | flour, water | [whitish] |
| Hundertpfund 1847: 125-7 | Germany | canvas panel | lead white ⁸¹³ | linseed oil | [white] |
| Hundertpfund 1849: 105-9 | England | canvas panel | lead white ⁸¹⁴ | oil | [white] |
| W&N recipe book 'P.09' 1854: 9PP017L01 ⁸¹⁵ | England | canvas | zinc oxide | meguilp (beeswax, turpentine, double mastic varnish) | [white] |
| Hopman 1856: 135-6 | Netherlands | canvas | yellow ochre, white, black | [oil] | [light brown] |
| Tyrwhitt 1868: 338-9 | England | canvas | cadmium or yellow ochre, pink madder, lead white | turpentine, [oil] | warm white |
| W&N recipe book 'P.04' 1871: P4P140L01 | England | canvas | putty, white lead, patent driers | [oil, varnish] | [warm white] |
| Dietrich 1871: 21-2 | Germany | canvas | slaked lime | glue, honey | [white] |
| Knowlton 1879: 029-30 | England | canvas millboard | lead white | spirits of turpentine [oil] | white |
| Knowlton 1879: 030-1 | England | canvas millboard | lead white ⁸¹⁶ | [oil] | white |
| Spon 1879: 113 | England | canvas | lead white, whiting, burnt ochre, pumice stone | raw oil, turpentine, gold size | [light orange] |
| Grace 1881: 87 | England | canvas | flake white, chalk | oil, | white |

⁸¹² Before use, this layer is washed with potash lye and covered with pulverized pumice stone and lead white in linseed oil varnish, which will probably lighten the colour somewhat.

⁸¹³ A layer of flour is sprinkled on while the lead white/linseed oil layer is still tacky

⁸¹⁴ A layer of flour is sprinkled on while the lead white/oil layer is still tacky

⁸¹⁵ The same recipe appears twice in P.09, also on page 15, unique recipe code 9PP015L01.

⁸¹⁶ A layer of flour is sprinkled on while the lead white/oil layer is still tacky

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|-----------------------------------|---|---|-----------------------|
| | | | | turpentine oil, linseed oil | |
| Grace 1881: 87-8 | England | canvas | flake white | egg, water, French white vinegar | white |
| Grace 1881: 88 | England | canvas | lead white with wash of yellow ochre, ivory black | benzoline or turpentine, or tube paint, or water | [off white] |
| Blockx 1881: 4 | Belgium | canvas panel | - | - | white |
| Ellis 1883: 146 | England | canvas | lead white | linseed or poppy oil | white |
| <i>Technische Mitteilungen nr 25 (1886): 39</i> | Germany | canvas panel | slaked chalk, white bole or china clay | Cologne glue or rabbitskin glue, with shellac sealing layer on top | [light orange] |
| <i>Technische Mitteilungen nr 25 (1886): 39</i> | Germany | canvas | lead white, clay | oil, caoutchouc | [white] |
| Raycroft et al. 1888: 23-4 | England | canvas panel board paper | - | - | light grey [white] |
| Raycroft et al. 1888: 25 | England | canvas | silver white, ivory black | [oil] | light grey |
| Church 1890: 26 | England | canvas | lead white, with zinc white dusted over, alternatively thin layer of zinc white in drying oil | linseed oil | white |
| Vibert 1892: 108-9, 193 | England | canvas | zinc white | watercolour fixative, dammar | white |
| Vibert 1892: 186-8, 108 | England | canvas panel board | zinc white | casein paste | white |
| Standage 1892: 73-4 | England | canvas | zinc white | [oil] | white |
| Standage 1892: 73-4 | England | canvas | thin coat of umber over lead white ground | [oil] | [greyish brown] |
| <i>Technische Mitteilungen, nr</i> | Germany | canvas panel | chalk ground | glue, with boiled | [cream] |

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--|-------------------------------------|-----------------|---|---|----------------------|
| 20 (1895): 1-2 | | | | linseed oil sealing layer | |
| <i>Technische Mitteilungen</i> , nr 9 (1897): 2 | Germany | canvas board | burnt chalk | water, beeswax, linseed oil, white cheese | [white] |

13c Copper and other metal supports ground colour

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|--|-------------------------------------|---------------------------|---|---------------------------|--------------------------------|
| Pacheco 1649: 385 | Spain | metal stone | lead white, umber | oil | [warm grey or drab] |
| Eikelenberg 1679-1704: 159 | Netherlands | copper | white or green ashes, vermilion, yellow ochre | [oil] | [light brown] |
| De la Hire 1730: 709 | France | panel canvas copper | lead white or ceruse, little brown red, little carbon black | [oil] | [warm grey] |
| Barrow 1754: n.p. | England | canvas copper | lead white, charcoal black | [oil] | grey |
| Dossie 1758: 204 | England | copper | lead [white] | oil | white |
| Dossie 1758: 204 | England | copper | ochre | oil | [yellow] |
| Jombert/De Piles 1766: 137-8 | France | copper | lead white, brown red, carbon black | [oil] | warm grey |
| <i>Nieuwen verlichter</i> 1777: 170 | Netherlands | copper | lead white, brown red, carbon black | oil | warm grey |
| Boutard 1826: 36 | France | canvas panel copper | - | - | light grey |
| Boutard 1826: 36 | France | canvas panel copper | - | - | brown red |
| Bouvier 1827: 571-2 | France | all supports | lead white, yellow ochre, little clear red nr. 7 | nut oil | light orangy gold |
| Bouvier 1828: 423-4 | Germany | all supports | lead white, yellow ochre, bright red ochre nr. 7 | nut oil | bright, gold, little orangy |
| Vergnaud 1831: 119 | France | all supports | lead white | oil | white |
| Hampel 1846: | Germany | copper | lead white, dark ochre | linseed oil | [cream] |

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|-------------------------------|-------------------------------------|------------------------------------|---|---------------------------|--------------------------|
| 28 | | | | varnish | |
| Hampel 1846: 28-9 | Germany | zinc plate precious stone | lead white, dark ochre | linseed oil varnish | [light brown] [cream] |

13d Board and paper ground colour

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|-----------------------------------|--|---|--------------------------------|
| Fokke Simonsz 1803-4: 84-5 | Netherlands | paper | chalk | glue | white |
| Bouvier 1827: 571-2 | France | all supports | lead white, yellow ochre, little clear red nr. 7 | nut oil | light orangy gold |
| Bouvier 1828: 423-4 | Germany | all supports | lead white, yellow ochre, bright red ochre nr. 7 | nut oil | bright, gold, little orangy |
| Vergnaud 1831: 119 | France | all supports | lead white | oil | white |
| Sully 1809-71 (recipe date 1841): 113 | United States | paper | lead white | skimmed milk | white |
| Knowlton 1879: 29-30 | England | canvas millboard | lead white | spirits of turpentine [oil] | white |
| Knowlton 1879: 30-1 | England | canvas millboard | lead white ⁸¹⁷ | [oil] | white |
| Raycroft et al. 1888: 23-4 | England | canvas panel board paper | - | - | light grey [white] |
| <i>Technische Mitteilungen,</i> nr 9 (1897): 2 | Germany | canvas board | burnt chalk | water, beeswax, linseed oil, white cheese | [white] |

13e Ground colour supports not specified

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|-------------------------------|-------------------------------------|----------------|---|---------------------------|----------------------|
| Stalker and Parker 1688: | England | unspecified | lead white, red or brown ochre, umber, | oil | [greyish brown] |

⁸¹⁷ A layer of flour is sprinkled on while the lead white/oil layer is still tacky

| <i>source, date, page</i> | <i>geographic origin recipe</i> | <i>support</i> | <i>pigmentation (of upper ground layer)</i> | <i>binding medium</i> | <i>ground colour</i> |
|---|-------------------------------------|---|---|---|--|
| 54 | | | pot scrapings | | |
| Wiltshut ms. 1701: 27-8 | Netherlands | unspecified | ceruse, blue black, brown ochre | [oil] | not too brown, towards rose colour |
| Wiltshut ms. 1701: 27-8 | Netherlands | unspecified | blue black chalk, a little brown red and ochre | [oil] | [light orangy brown] |
| Wiltshut ms. 1701: 27-8 | Netherlands | unspecified, for painting flowers | blue black chalk, a little brown red, ochre, a little ultramarine or smalt | [oil] | [somewhat cooler brown] |
| Dutens 1779: 62 | France | unspecified | - | - | white |
| Jahn 1803: 46 | Germany | unspecified | - | - | white |
| Sully 1809-71 (recipe date 1810): 006 | United States | [unspecified] | whiting | weak size, treacle | white |
| Verri 1814: 110 | Italy | [unspecified] | - | - | white |
| Craig 1821: 426 | England | [unspecified] | - | - | white |
| Sully 1809-71 (recipe date 1828): 134 | United States | [unspecified] | lead white | skimmed milk | white |
| Montabert 1829: 180 | France | [unspecified] | - | - | ivory |
| Roberson 1840: A | England | unspecified | whiting, lead white | linseed oil, beeswax, treacle, size | white |
| Sully 1809-71 (recipe date 1845): 130 | United States | [unspecified] | lead white | skimmed milk | white |