CPC   COOPERATIVE PATENT CLASSIFICATION

C   CHEMISTRY; METALLURGY

(NOTES omitted)

CHEMISTRY

C09   DYES; PAINTS; POLISHES; NATURAL RESINS; ADHESIVES; MISCELLANEOUS COMPOSITIONS; MISCELLANEOUS APPLICATIONS OF MATERIALS

C09B  ORGANIC DYES OR CLOSELY-RELATED COMPOUNDS FOR PRODUCING DYES {, e.g. PIGMENTS}; MORDANTS; LAKES (fermentation or enzyme using processes to synthesise a desired chemical compound C12P)

NOTE
In this subclass, in the absence of an indication to the contrary, a compound is classified in the last appropriate place

WARNING
The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

C09B 23/01 covered by C09B 23/0008 - C09B 23/0091
C09B 29/01 covered by C09B 29/0003 - C09B 29/0022
C09B 29/03 covered by C09B 29/0007
C09B 29/033 covered by C09B 29/0025
C09B 29/036 covered by C09B 29/0029
C09B 29/039 covered by C09B 29/0074 - C09B 29/0081
C09B 29/042 covered by C09B 29/0085
C09B 29/045 covered by C09B 29/0088
C09B 29/048 covered by C09B 29/0092
C09B 29/085 covered by C09B 29/0025, C09B 29/0801 - C09B 29/0848
C09B 29/09 covered by C09B 29/0074 - C09B 29/0081
C09B 29/15 covered by C09B 29/103
C09B 29/40 covered by C09B 29/3608 - C09B 29/3613
C09B 29/42 covered by C09B 29/3617 - C09B 29/3639
C09B 29/44 covered by C09B 29/3643
C09B 29/46 covered by C09B 29/3652
C09B 29/48 covered by C09B 29/3656
C09B 29/50 covered by C09B 29/366
C09B 29/52 covered by C09B 29/3665
C09B 33/13 covered by C09B 33/12
C09B 46/00 covered by C09B 27/00 - C09B 45/00
C09B 67/02 covered by C09B 67/0097
C09B 67/04 covered by C09B 67/0001
C09B 67/06 covered by C09B 67/0003
C09B 67/08 covered by C09B 67/0004
C09B 67/10 covered by C09B 67/0014
C09B 67/12 covered by C09B 67/0016
C09B 67/14 covered by C09B 67/0017
C09B 67/16 covered by C09B 67/0019
C09B 67/18 covered by C09B 67/0024
C09B 67/20 covered by C09B 67/006
C09B 67/22 covered by C09B 67/0033
C09B 67/24 covered by C09B 67/0072
C09B 67/26 covered by C09B 67/0073
C09B 67/28 covered by C09B 67/0077
C09B 67/30 covered by C09B 67/0078
C09B 67/32 covered by C09B 67/0075
C09B 67/34 covered by C09B 67/0076
C09B 67/36 covered by C09B 67/0079
C09B 67/38 covered by C09B 67/008
C09B 67/40 covered by C09B 67/0082
C09B 67/42 covered by C09B 67/0071
C09B 67/44 covered by C09B 67/0083
Anthracene dyes

C09B

(continued)

C09B 67/46 covered by C09B 67/0084
C09B 67/48 covered by C09B 67/0025
C09B 67/50 covered by C09B 67/0026
C09B 67/52 covered by C09B 67/0027
C09B 67/54 covered by C09B 67/0096

1/00 Dyes with anthracene nucleus not condensed with any other ring

1/002 . . [containing onium groups]
1/007 . . [Di-anthraquinonyl and derivative compounds]
1/02 . . Hydroxy-anthraquinones; Esters or esters thereof

{(C09B 1/007 takes precedence)}

1/04 . . Preparation by synthesis of the nucleus
1/06 . . Preparation from starting materials already containing the anthracene nucleus
1/08 . . Dyes containing only OH-groups
1/10 . . Dyes containing halogen
1/12 . . Dyes containing sulfonic acid groups
1/14 . . Dyes containing ether groups
1/16 . . Amino-anthraquinones {(C09B 1/007 takes precedence)}

1/18 . . Preparation by synthesis of the nucleus
1/20 . . Preparation from starting materials already containing the anthracene nucleus
1/201 . . {Dyes with no other substituents than the amino groups}
1/202 . . [sulfonated]
1/203 . . {only sulfonated in the anthracene nucleus}
1/204 . . {only sulfonated in a substituent}
1/205 . . {Dyes with an unsaturated C on the N atom attached to the nucleus (C=O and C=S, C09B 1/36)}

1/206 . . {Dyes with amino groups substituted by heterocyclic radicals (triazinic or analogous heterocyclic radical, C09B 1/46)}
1/207 . . {Dyes with amino groups and with onium groups}
1/208 . . {Dyes with amino groups substituted by inorganic radicals}
1/22 . . Dyes with unsubstituted amino groups
1/24 . . sulfonated
1/26 . . Dyes with amino groups substituted by hydrocarbon radicals
1/262 . . {Dyes with no other substituents than the substituted amino groups}
1/264 . . [sulfonated]
1/266 . . {only sulfonated in the anthracene nucleus}
1/268 . . {only sulfonated in a substituent}
1/28 . . substituted by alky1, aralkyl or cyclo alkyl groups
1/285 . . {Dyes with no other substituents than the amino groups}
1/30 . . sulfonated
1/303 . . {only sulfonated in the anthracene nucleus}
1/306 . . {only sulfonated in a substituent}
1/32 . . substituted by aryl groups (anthrimides C09B 1/48)

1/325 . . . . . . {Dyes with no other substituents than the amino groups}
1/34 . . . . . . sulfonated
1/343 . . . . . . {only sulfonated in the anthracene nucleus}
1/346 . . . . . . {only sulfonated in a substituent}
1/36 . . Dyes with acylated amino groups
1/363 . . . . . . {the acyl groups being residues of a dicarboxylic compound forming a bridge between two anthraquinones}
1/366 . . . . . . {Urethan derivatives}
1/38 . . . . . . Urea and thiourea derivatives
1/40 . . . . . . the acyl groups being residues of an aliphatic or araliphatic carboxylic acid
1/405 . . . . . . {dicarboxylic}
1/42 . . . . . . the acyl groups being residues of an aromatic carboxylic acid
1/425 . . . . . . {dicarboxylic}
1/43 . . . . . . Dicarboxylic acids
1/44 . . . . . . the acyl groups being residues of a heterocyclic carboxylic acid
1/445 . . . . . . {dicarboxylic}
1/46 . . . . . . the acyl groups being residues of cyanuric acid or an analogous heterocyclic compound
1/467 . . . . . . attached to two or more anthraquinone rings
1/473 . . . . . . the acyl groups being residues of a sulfonic acid
1/48 . . . . . . Anthrimides
1/50 . . . . . . Amino-hydroxy-anthraquinones; Esters and esters thereof {(C09B 1/007 takes precedence)}
1/501 . . . . . . {containing onium groups}
1/503 . . . . . . unsubstituted amino-hydroxy anthraquinone
1/5035 . . . . . . {only amino and hydroxy groups}
1/51 . . . . . . N-substituted amino-hydroxy anthraquinone
1/512 . . . . . . {only amino and hydroxy groups}
1/514 . . . . . . N-aryl derivatives (N-aralkyl derivatives C09B 1/515)
1/5145 . . . . . . {only amino and hydroxy groups}
1/515 . . . . . . N-alkyl, N-aralkyl or N-cycloalkyl derivatives
1/5155 . . . . . . {only amino and hydroxy groups}
1/516 . . . . . . N-acylated derivatives
1/5165 . . . . . . {only amino and hydroxy groups}
1/52 . . sulfonated
1/521 . . . . . . [unsubstituted amino and hydroxy groups]
1/523 . . . . . . {N-substituted amino and hydroxy anthraquinone}
1/525 . . . . . . {N-aryl derivatives}
1/526 . . . . . . {N-alkyl, N-aralkyl or N-cycloalkyl derivatives}
1/528 . . . . . . {N-acyl derivatives}
1/54 . . etherified
1/542 . . . . . . {Anthraquinones with aliphatic, cycloaliphatic, araliphatic or aromatic ether groups}
1/545 . . . . . . {Anthraquinones with aliphatic, cycloaliphatic or araliphatic ether groups}
Anthracene dyes

3/54 . . . Preparation from starting materials already containing the dibenzopyrenequinone nucleus
3/56 . . . Amino derivatives
3/58 . Benzanthraquinones
3/60 . Anthanthrones
3/62 . . Preparation by synthesis of the nucleus
3/64 . . Preparation from starting materials already containing the anthanthrone nucleus
3/66 . . . by halogenation
3/68 . . . Amino derivatives
3/70 . Benzo-, naphtho-, and anthra-dianthrones
3/72 . . Preparation by synthesis of the nucleus
3/74 . . . Preparation from starting materials already containing the benzo, naphtho-, or anthradianthrene nucleus
3/76 . . . . by halogenation
3/78 . Other dyes in which the anthracene nucleus is condensed with one or more carbocyclic rings
3/80 . . Preparation by synthesis of the nucleus
3/82 . . Preparation from starting materials already containing the condensed anthracene nucleus

5/00 Dyes with an anthracene nucleus condensed with one or more heterocyclic rings with or without carbocyclic rings
5/002 . . . [the heterocyclic rings being condensed in peri position and in 1-2 or 2-3 position]
5/004 . . . [only O-containing hetero rings]
5/006 . . . [only S-containing hetero rings]
5/008 . . . [only N-containing hetero rings]
5/02 . . . . the heterocyclic ring being [only] condensed in peri position
5/022 . . . . [not provided for in one of the sub groups C09B 5/24 - C09B 5/20]
5/024 . . . . [only O-containing hetero rings]
5/026 . . . . [only S-containing hetero rings]
5/028 . . . . [only N-containing hetero rings]
5/04 . . Pyrazolanthrones
5/06 . . Benzanthronyl-pyrazolanthrone condensation products
5/08 . . Dipyrazolanthrones
5/085 . . . . [Condensation products of dipyrazolanthrones]
5/10 . . Isothiazolanthrones; Isoxazolanthrones; Isoselenolanthrones
5/12 . . Thiophenanthrones
5/14 . . Benz-azabenzenanthrones (anthrapyridiones)
5/16 . . Benz-diazabenzenanthrones, e.g. anthrapyrimidiones
5/18 . . Coerioxene; Coerhiene; Coeramidene; Derivatives thereof
5/20 . . . Flavananthrones
5/22 . . . Preparation from starting materials already containing the flavanthrone nucleus
5/24 . . . . the heterocyclic rings being [only] condensed with an anthraquinone nucleus in 1-2 or 2-3 position
5/2409 . . . . [not provided for in one of the sub groups C09B 5/26 - C09B 5/62]
5/2418 . . . . [only oxygen-containing hetero rings]
5/2427 . . . . [only sulfur-containing hetero rings]
5/2436 . . . . [only nitrogen-containing hetero rings]
5/2445 . . . . [Phthaloyl isoindoles]
5/2454 . . . . . . [5,6 phthaloyl dihydro isoindoles]
5/2463 . . . . . . . . [1,3 oxo or imino derivatives]
Anthracene dyes

7/00 Indigoid dyes
7/02 . . Bis-indole indigos
7/04 . . Halogenation thereof
7/06 . . Indone-thionaphene indigos
7/08 . . Other indole-indigos
7/10 . . Bis-thionaphene indigos
7/12 . . Other thionaphene indigos

9/00 Esters or ester-salts of leuco compounds of vat dye-stuffs
9/02 . . of anthracene dyes
9/04 . . of indigoid dyes

11/00 Diaryl- or triarylmethane dyes
11/02 . . derived from diarylmethanes, [i.e. central C-atom is substituted by amino, cyano, alkyl]
11/04 . . derived from triarylmethanes, [and their ethers or esters]
11/06 . . Hydroxy derivatives of triarylmethanes in which at least one OH group is bound to an aryl nucleus
11/08 . . Phthalines; [Phenolphthaleins; Fluorescein]
11/10 . . Amino derivatives of triarylmethanes
11/12 . . without any OH group bound to an aryl nucleus
11/14 . . Preparation from aromatic aldehydes, aromatic carboxylic acids or derivatives thereof and aromatic amines
11/16 . . Preparation from diarylketones or diarylcarbinols, [e.g. benzhydrol]

11/18 . . . Preparation by oxidation
11/20 . . . Preparation from other triarylmethane derivatives, [e.g. by substitution, by replacement of substituents (for dyesalts of triarylmethane dyes C09B 69/06)]
11/22 . . containing OH groups bound to an aryl nucleus [and their ethers and esters]
11/24 . . Phthalins containing amino groups [Phthalins; Fluoranines; Phthalides; Rhodamine dyes; Phthalins having heterocyclic aryl rings; Lactone or lactame forms of triarylmethane dyes]
11/26 . . Triarylmethane dyes in which at least one of the aromatic nuclei is heterocyclic (phthalins C09B 11/24)
11/28 . . Pyronines; [Xanthone, thioxanthone, selenoxanthon, telluroxanthone dyes]

13/00 Oxyketone dyes
13/02 . . of the naphthalene series, e.g. naphthazarin
13/04 . . of the pyrene series
13/06 . . of the acetoephene series

Acridine, azine, oxazine, or thiazine dyes

15/00 Acridine dyes
17/00 Azine dyes
17/005 . . (Dyes containing at least four ortho-condensed rings with at least two ring N-atoms in the system, e.g. fluoflavine, fluorubine, fluorindine)
17/02 . . of the benzene series
17/04 . . of the naphthalene series
17/06 . . Fluorindine or its derivatives

19/00 Oxazine dyes
19/005 . . [Gallocyanine dyes]
19/02 . . Bisoxazines prepared from aminoxinones

21/00 Thiazine dyes

Quinoline or polymethine dyes

23/00 Methine or polymethine dyes, e.g. cyanine dyes
23/0008 . . [substituted on the polymethine chain]
23/0016 . . [the substituent being a halogen atom]
23/0025 . . [the substituent being bound through an oxygen atom]
23/0033 . . [the substituent being bound through a sulfur atom]
23/0041 . . [the substituent being bound through a nitrogen atom]
23/005 . . [the substituent being a COOH and/or a functional derivative thereof]
23/0058 . . [the substituent being CN]
23/0066 . . [the polymethylene chain being part of a carboxyclic ring, (e.g. benzene, naphthalene, cyclohexene, cyclobutenene-quadratic acid)]
23/0075 . . [the polymethylene chain being part of an heterocyclic ring]
23/0083 . . [the heteroring being rhodanine in the chain]
23/0091 . . [having only one heterocyclic ring at one end of the methine chain, e.g. hemicyanines, hemioxonol (styryl dyes see C09B 23/14)]

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4
Quinoline or polymethine dyes

NOTE

In groups C09B 27/00 - C09B 45/00, arrows in the formulae of the various types of azo dyes indicate which part of an azo dye, prepared by diazotising and coupling, is derived from the diazo component and which part is derived from the coupling component. The arrow is pointing to the part derived from the coupling component.

27/00 Preparations in which the azo group is formed in any way other than by diazotising and coupling, (e.g. oxidation)

27/06 Tartrazines

29/00 Monoazo dyes prepared by diazotising and coupling

23/02 . the polymethine chain containing an odd number of >CH- (or >C[alkyl]-) groups

23/04 . one >CH- group, e.g. cyanines, isocyanines, pseudocyanines

23/06 . three >CH- groups, e.g. carbocyanines

23/08 . more than three >CH- groups, e.g. polycarbocyanines

23/083 . . { five >CH- groups}

23/086 . . { more than five >CH- groups}

23/10 . The polymethine chain containing an even number of >CH- groups ((styril dyes C09B 23/14, C09B 23/14 takes precedence))

23/102 . . { two heterocyclic rings linked carbon-to-carbon (C09B 7/00 takes precedence)}

23/105 . . { two >CH- groups}

23/107 . . { four >CH- groups}

23/12 . the polymethine chain being branched ("branched" means that the substituent on the polymethine chain forms a new conjugated system, e.g. most trinuclear cyanine dyes)

23/14 . Styril dyes

23/141 . . { Bis styril dyes containing two radicals CH=CH=CH=CH-}

23/143 . . { the ethylene chain carrying a COOH or a functionally modified derivative, e.g. -CN, -COR, -COOR, -CON=, CH=CH=CH=C-CN}

23/145 . . { the ethylene chain carrying an heterocyclic residue, e.g. heterocycle-CH=CH-C=H}

23/146 . . . { (Benzothiazolstyrlylamino dyes)}

23/148 . . { Stilbene dyes containing the moiety -C6H5-CH=CH-C6H5, stilbeneazo dyes C09B 29/001}

23/16 . the polymethine chain containing hetero atoms

23/162 . . { only nitrogen atoms (azomethine dyes C09B 55/00, e.g. those of formula aryl-CH=N-aryl; formazan dyes C09B 50/00, e.g. dyes containing the moiety -N=N-)}

23/164 . . . { containing one nitrogen atom}

23/166 . . . { containing two or more nitrogen atoms (hydrazo dyes -CH=N-N- C09B 26/021)}

23/168 . . . { containing only phosphorus atoms, i.e. phospacyanine)

25/00 Quinophthalones

26/00 Hydrazine dyes; Triazene dyes

26/02 . Hydrazine dyes (hydrazine-azo dyes C09B 56/18)

26/04 . cationic

26/06 . Triazene dyes (triazene-azo dyes C09B 56/20)

Azo dyes

NOTE
Azo dyes

Amino naphthalenes

{ containing water solubilizing groups }

N\textsuperscript{H}COO-C\textsubscript{2}C\textsubscript{3}benzene ring excepted the substituents: CH\textsubscript{2}\{ substituted by halogen \}
directly to the benzene ring
{ substituted by carbocyclic ring linked through -S- }
directly to the benzene ring
{ substituted by alkyl, e.g. CF\textsubscript{3}C\textsubscript{09B} ( ) }
{ linked through -O- ( for OH see C09B 29/0826, 29/0828 ) }
{ having (Image) }
{ having N(-alkenylene-CN/-alkynylene-CN)(-alkenylene-CN/ }
{ having N(-alkenylene-CN/-alkynylene-CN)(-alkenylene-CN)(-aliphatic residue-CN) }
{ having N(-alkenylene-CN/-alkynylene-CN)(-alkenylene-CN)-(aliphatic residue-CN) }
{ having N(-alkenylene-CN/-alkynylene-CN)(-alkenylene-CN)-(aliphatic residue-CN) }
{ having N(-alkenylene-CN/-alkynylene-CN)(-alkenylene-CN)-(aliphatic residue-CN) }
{ having (Image) }
{ having (Image) }

from other coupling components

from heterocyclic compounds

from coupling components containing hydroxy as the only directing group

{ of the naphthalene series }

{ containing amino-1,2-diazoles }

{ containing only oxygen as heteroatom }

{ containing a six-membered heterocyclic ring with only one nitrogen as heteroatom }

{ containing a five-membered ring with only one nitrogen as heteroatom }

{ containing one or more hydroxyl groups (or = O) }

{ from diazotized amino carbocyclic rings }

{ from diazotized heterocyclic rings }

{ from a pyridine ring containing one or more amino groups }

{ from quinolines or hydrogenated quinolines }

{ containing only a nitrogen as heteroatom }

{ containing a five-membered heterocyclic ring with only one nitrogen as heteroatom }

{ containing a six-membered heterocyclic ring with only one nitrogen as heteroatom }

{ from a pyridine ring }

{ from a pyridine ring containing one or more hydroxyl groups (or = O) }

{ from diazotized amino carbocyclic rings }

{ from diazotized heterocyclic rings }

{ from a pyridine ring containing one or more amino groups }

{ from quinolines or hydrogenated quinolines }

{ containing a five-membered ring with two nitrogen atoms as heteroatoms }

{ containing a 1,2-diazoles or hydrogenated 1,2-diazoles }

{ containing amino-1,2-diazoles }

{ containing hydroxy-1,2-diazoles, e.g. pyrazolone }

{ containing a six-membered heterocyclic ring with two nitrogen atoms }

{ from a pyrimidine ring }

{ from Barbituric acid and derivatives thereof }

{ containing only oxygen as heteroatom }

Azo dyes

Amino naphthol sulfonic acid

Amino naphtholsulfonic acid

from coupling components containing a reactive methylene group

{ from coupling components containing a reactive methylene group }

{ containing acid groups, e.g. COOH, SO\textsubscript{3}H, PO\textsubscript{3}H\textsubscript{2}, OSO\textsubscript{3}H, OP\textsubscript{3}H\textsubscript{2}; Salts thereof }
Disazo and polyazo dyes of the type A->B->C, A->B>C->D, or the like, prepared by diazotising and coupling

31/00 Disazo and polyazo dyes of the type A->B->C, A->B>C->D, or the like, prepared by diazotising and coupling

31/02 Disazo dyes

31/04 from a coupling component "C" containing a directive amino group

31/06 from a coupling component "C" containing a directive hydroxyl group

31/08 from a coupling component "C" containing a directive hydroxyl and amino groups

31/10 from a coupling component "C" containing reactive methylene groups

31/14 Heterocyclic components

31/16 Trisazo dyes

31/18 from a coupling component "D" containing a directive amine group

31/20 from a coupling component "D" containing a directive hydroxyl group

31/22 from a coupling component "D" containing directive hydroxyl and amino groups

31/24 from a coupling component "D" containing reactive methylene groups

31/26 other coupling components "D"

31/28 Heterocyclic compounds

31/30 Other polyazo dyes

33/00 Disazo and polyazo dyes of the types A->K<-B, A->B->K<-C, or the like, prepared by diazotising and coupling

33/02 Disazo dyes

33/04 in which the coupling component is a dihydroxy or polyhydroxy compound

33/06 in which the coupling component is a bis-phenol

33/08 in which the coupling component is a bis-naphthol

33/10 in which the coupling component is an amino naphthol

33/12 in which the coupling component is a heterocyclic compound

33/14 in which the coupling component is a bis-(hydroxy-carboxylic acid amide)

33/16 from other coupling components

33/18 Trisazo or higher polyazo dyes

33/22 Trisazo dyes of the type A->B->K<-C

33/24 Trisazo dyes of the type A->K<-B

35/00 Disazo and polyazo dyes of the type A->B->K prepared by diazotising and coupling

35/02 Disazo dyes

35/04 characterised by two coupling components of the same type

35/06 in which the coupling component is a hydroxy or polyhydroxy compound

35/08 in which the coupling component is an amine or polyamine

35/10 in which the coupling component is a hydroxy-amino compound

35/12 from other coupling components "C"

35/14 Heterocyclic components

35/16 Trisazo dyes

35/18 from a coupling component "D" containing a directive amine group

35/20 from a coupling component "D" containing a directive hydroxyl group

35/22 containing a six-membered ring with one nitrogen atom as the only ring hetero-atom
Azo dyes

35/033 . . . in which the coupling component is an arylamide of an o-hydroxy-carboxylic acid or of a beta-keto-carboxylic acid
35/035 . . . in which the coupling component containing an activated methylene group
35/037 . . . characterised by two coupling components of different types
35/039 . . . characterised by the tetrazo component
35/04 . . . the tetrazo component being a benzene derivative
35/06 . . . the tetrazo component being a naphthalene derivative
35/08 . . . the tetrazo component being a derivative of biphenyl
35/10 . . . from two coupling components of the same type
35/105 . . . from two coupling components of different types
35/12 . . . from amines
35/14 . . . from hydroxy compounds
35/16 . . . from hydroxy-amines
35/18 . . . from heterocyclic compounds
35/185 . . . {from pyridine or pyridone components
35/20 . . . from two coupling components of different types
35/205 . . . the tetrazo component being a derivative of a diaryl- or triaryl- alkane or-alkene
35/21 . . . . of diarylmethane or triarylmethane
35/215 . . . . of diarylethane or diarylethene (other stilbene-azo dyes, C09B 56/04, C09B 56/06)
35/22 . . . the tetrazo component being a derivative of a diaryl ether
35/227 . . . the tetrazo component being a derivative of a diaryl sulfide or a diaryl polysulfide
35/233 . . . the tetrazo component being a derivative of a diaryl ketone or benzil
35/24 . . . the tetrazo component being a derivative of a diaryl amine
35/26 . . . the tetrazo component being a derivative of a diaryl urea
35/28 . . . the tetrazo component containing two aryl nuclei linked by at least one of the groups —CON<, —SO₂N<, —SO₂—, or —SO₂—O—
35/30 . . . from two identical coupling components
35/32 . . . from two different coupling components
35/34 . . . the tetrazo component being heterocyclic
35/35 . . . Trisazo dyes in which the tetrazo component is a diamino-azo-aryl compound
35/36 . . . Trisazo dyes of the type
35/362 . . . D is benzene
35/364 . . . D is naphthalene
35/366 . . . D is diphenyl
35/368 . . . D is diarylether, a diarylsulfide or a diaryl polysulfide
35/37 . . . D is diarylamine
35/372 . . . D is diarylurea
35/374 . . . D contains two aryl nuclei linked by at least one of the groups —CON<, —SO₂N<, —SO₂—, or —SO₂—O—
35/376 . . . D is a heterocyclic compound
35/378 . . . Trisazo dyes of the type
35/38 . . . Trisazo dyes of the type
35/40 . . . the component K being a dihydroxy or polyhydroxy compound
35/42 . . . the component K being a diamine or polyamine
35/44 . . . the component K being a hydroxy amine
35/46 . . . the component K being an amino naphthol
35/461 . . . . {D being derived from diaminobenzene}
35/462 . . . . {D being derived from diaminonaphthalene}
35/463 . . . . {D being derived from diaminodiphenyl}
35/464 . . . . {D being derived from diaminodiarylether(thio)ether}
35/465 . . . . {D being derived from diaminodiarylamine}
35/466 . . . . {D being derived from diaminodiarylurea}
35/467 . . . . {D being derived from diaminodiarylketone}
35/468 . . . . {D being derived from diaminodiarylmethane}
35/469 . . . . {D being derived from heterocyclic diamine}
35/48 . . . the component K being heterocyclic
35/50 . . . Tetrazo dyes
35/52 . . . of the type
35/54 . . . of the type
35/56 . . . of the type
35/58 . . . of the type
35/60 . . . of the type
35/62 . . . of the type
35/64 . . . Higher polyazo dyes, e.g. of the types
37/00 Azo dyes prepared by coupling the diazotised amine with itself
39/00 Other azo dyes prepared by diazotising and coupling
41/00 Special methods of performing the coupling reaction (reaction of mixtures of diazo and coupling components, C09B 67/0033)
Azo dyes

Preparation of azo dyes from other azo compounds

43/00  Preparation of azo dyes from other azo compounds
43/003  (Cyclisation of azo dyes; Condensation of azo dyes with formation of ring, e.g. of azopyrazolone dyes)
43/006  (by introduction of hydrocarbon radicals on C-atom of azo dye)
43/02  by sulfonation
43/04  by nitration
43/06  by oxidation
43/08  by reduction
43/085  (by reacting nitro azo dyes with amine or amino azo dye with nitro compounds)
43/10  with formation of a new azo or an azoxy bridge
43/11  by introducing hydrocarbon radicals or substituted hydrocarbon radicals on primary or secondary amino groups (formation of an amino group by reduction, e.g. of a nitro group, C09B 43/08)
43/12  by acylation of amino groups
43/124  with monocarboxylic acids, carbamic acid esters or halides, mono-isocyanates, or halofomric acid esters
43/1242  (with heterocyclic monocarboxylic acids)
43/1245  (with formation of NHCOOR, NHCSOR or NHCSOR groups by acylation)
43/1247  (with formation of NHSO3R or NHSO3H radicals)
43/128  Aliphatic, cycloaliphatic or araliphatic acids
43/132  having the carboxylic group directly attached to an aromatic carbocyclic ring
43/136  with polyfunctional acylating agents
43/14  with phosgene or thiophosgene
43/145  with polycarboxylic acids
43/15  with formation of cyclic imides of ortho- or peri-dicarboxylic acids
43/155  with di- or poly-isocyanates
43/16  linking amino-azo or cyanuric acid residues
43/18  by acylation of hydroxyl group (or of mercapto group; (OP3O2H and OP(X)2 with X=O,S,NH and R being hydrocarbon, C09B 43/08)
43/20  with monocarboxylic acids, carbamic acid esters or halides, mono-isocyanates or haloformic acid esters
43/202  (Aliphatic, cycloaliphatic, araliphatic carbonylic acid esters)
43/204  (Heterocyclic monocarboxylic acids)
43/206  (with formation of OCXN or OSO2N group)
43/208  (with formation of OCXXH or OCXXR and R being hydrocarbon)
43/22  having the carboxylic group directly attached to an aromatic carbocyclic ring
43/24  with formation of —O—SO2—R or —O—SO2H radicals
43/26  with polyfunctional acylating agents
43/263  (Polycarboxylic acids)
43/266  (Di-or polyisocyanates)
43/28  by etherification of hydroxyl groups
43/30  by esterification of —COOH or —SO2H groups
43/32  by reacting carboxylic or sulfonic groups, or derivatives thereof, with amines; by reacting keto-groups with amines
43/325  (by reacting sulfonic acids with amines)
43/34  by reacting ortho- or peri-dicarboxylic acids
43/36  with amino-anthracene or amino-anthraquinone dyes
43/38  by reacting two or more ortho-hydroxy naphthoic acid dyes with polyamines
43/40  by substituting hetero atoms by radicals containing other hetero atoms
43/405  (by substituting radicals containing hetero atoms for -SO2R and R being hydrocarbon)
43/42  by substituting radicals containing hetero atoms for —CN radicals
43/44  by substituting amine groups for hydroxyl groups or hydroxyl groups for amine groups; Desacylation of amino-acyl groups; Deaminating

44/00  Azo dyes containing onium groups
44/005  (Special process features in the quaternization reaction)
44/02  containing ammonium groups not directly attached to an azo group
44/04  from coupling components containing amino as the only directing group
44/06  from coupling components containing hydroxyl as the only directing group
44/08  from coupling components containing heterocyclic rings
44/10  containing cyclammonium groups attached to an azo group by a carbon atom of the ring system
44/101  (characterised by the coupling component having an amino directing group)
44/102  (characterised by the coupling component having a reactive methylene group)
44/103  (characterised by the coupling component being a heterocyclic compound)
44/105  (derived from pyridine, pyridone)
44/106  (derived from pyrazoles, pyrazolones)
44/107  (characterised by a cyclammonium five-membered specific ring not mentioned hereafter: thiadiazolium, benzoxazolium)
44/108  (characterised by a cyclammonium six-membered specific ring not mentioned hereafter, e.g. pyrimidinium, perimidinium, pyridazonium, oxazinium)
44/12  having one nitrogen atom as the only ring hetero atom
44/123  (in a five-membered ring, e.g. pyrrolidin, indolium)
44/126  (in a six-membered ring, e.g. pyrrolidinium, quinolinium)
44/14  1, 2-Diazoles or hydrogenated 1,2-diazoles

[Cyclic azo dyes; Condensation of azo dyes; Hydrocarbon radicals on primary or secondary amino groups; Introduction of hydrocarbon radicals or substituted hydrocarbon radicals on primary or secondary amino groups (formation of an amino group by reduction, e.g. of a nitro group, C09B 43/08)]

[Carboxylic acids]

[Dicarboxylic acids]

[Aliphatic, cycloaliphatic, araliphatic acids]

[Polycarboxylic acids]

[Azo dyes; Condensation of azo dyes; Hydrocarbon radicals on primary or secondary amino groups; Introduction of hydrocarbon radicals or substituted hydrocarbon radicals on primary or secondary amino groups (formation of an amino group by reduction, e.g. of a nitro group, C09B 43/08)]

[Aliphatic, cycloaliphatic, araliphatic carbonylic acid esters]

[Heterocyclic monocarboxylic acids]

[With formation of OCXN or OSO2N group]

[With formation of OCXXH or OCXXR and R being hydrocarbon]

[Di-or polyisocyanates]

[By reacting hydroxyl groups with amine groups; Desacylation of amino-acyl groups; Deaminating]

[Derived from pyridine, pyridone]

[Derived from pyrazoles, pyrazolones]

[Characterised by a cyclammonium five-membered specific ring not mentioned hereafter: thiadiazolium, benzoxazolium]

[Characterised by a cyclammonium six-membered specific ring not mentioned hereafter, e.g. pyrimidinium, perimidinium, pyridazonium, oxazinium]

[Characterised by the coupling component having an amino directing group]

[Characterised by the coupling component having a reactive methylene group]

[Characterised by the coupling component being a heterocyclic compound]

[Derived from pyrazoles, pyrazolones]

[Characterised by a cyclammonium five-membered specific ring not mentioned hereafter: thiadiazolium, benzoxazolium]

[Characterised by a cyclammonium six-membered specific ring not mentioned hereafter, e.g. pyrimidinium, perimidinium, pyridazonium, oxazinium]

[Characterised by the coupling component having an amino directing group]

[Characterised by the coupling component having a reactive methylene group]

[Characterised by the coupling component being a heterocyclic compound]

[Derived from pyrazoles, pyrazolones]
Porphines; Azaporphyines
{(non-dyeing compounds C07D 487/22)}

47/00

47/04 . Phthalocyanines {abbreviation: Pc}

47/045 . [Special non-pigmentary uses, e.g. catalyst, photosensitisers of phthalocyanine dyes or pigments]

47/06 . Preparation from carboxylic acids or derivatives thereof, {e.g. anhydrides, amides, mononitriles, phthalimide, o-cyanobenzamide}

47/061 . [having halogen atoms linked directly to the Pc skeleton]

47/062 . [having alkyl radicals linked directly to the Pc skeleton, having carboxylic groups directly linked to the skeleton, e.g. phenyl]

47/063 . [having oxygen or sulfur atom(s) linked directly to the skeleton]

47/064 . [having nitrogen atom(s) directly linked to the skeleton]

47/065 . [having -COOH or -SO₃H radicals or derivatives thereof, directly linked to the skeleton]

47/067 . from phthalodinitriles {naphthalenedinitriles, aromatic dinitriles prepared in situ, hydrogenated phthalodinitrile}

47/0671 . [having halogen atoms linked directly to the Pc skeleton]

47/0673 . [having alkyl radicals linked directly to the Pc skeleton; having carbocyclic groups linked directly to the skeleton]

47/0675 . [having oxygen or sulfur linked directly to the skeleton]

47/0676 . [having nitrogen atom(s) linked directly to the skeleton]

47/0678 . [having-COOH or -SO₃H radicals or derivatives thereof directly linked to the skeleton]

47/073 . Preparation from isoindolenines {, e.g. pyrrolenines}

47/08 . Preparation from other phthalocyanine compounds {, e.g. cobaltphthalocyanineamine complex}

47/085 . [substituting the central metal atom]

47/10 . Obtaining compounds having halogen atoms directly bound to the phthalocyanine skeleton

47/12 . Obtaining compounds having alkyl radicals, or alkyl radicals substituted by hetero atoms, bound to the phthalocyanine skeleton

47/14 . having alkyl radicals substituted by halogen atoms

47/16 . having alkyl radicals substituted by nitrogen atoms

47/18 . Obtaining compounds having oxygen atoms directly bound to the phthalocyanine skeleton

47/20 . Obtaining compounds having sulfur atoms directly bound to the phthalocyanine skeleton

47/22 . Obtaining compounds having nitrogen atoms directly bound to the phthalocyanine skeleton

47/24 . Obtaining compounds having —COOH or —SO₃H radicals, or derivatives thereof, directly bound to the phthalocyanine radical

47/26 . Amide radicals

47/28 . Phthalocyanine dyes containing —S—SO₃H radicals

47/30 . Metal-free phthalocyanines

47/305 . {prepared by demetallizing metal Pc compounds}

47/31 . Cationic phthalocyanine dyes

48/00 Quinacridones

49/00 Sulfur dyes

49/02 . from nitro compounds of the benzene, naphthalene or anthracene series

49/04 . from amino compounds of the benzene, naphthalene or anthracene series

49/06 . from azines, oxazines, thiazines or thiazoles

49/08 . from urea derivatives

49/10 . from diphenylamines, indamines, or indophenols {, e.g. p-aminophenols or leucoindophenols}

49/12 . from other compounds {, e.g. other heterocyclic compounds}

49/122 . {from phthalocyanine compounds}

49/124 . {from polycarbocyclic compounds}
Azo dyes

Other synthetic dyes of known constitution

50/00 Formazane dyes; Tetrazolium dyes
50/02 Tetrazolium dyes
50/04 Metal-free formazan dyes
50/06 Bis-formazan dyes
50/08 Meso-acyl formazan dyes
50/10 Cationic formazan dyes

51/00 Nitro or nitroso dyes
51/005 [Nitroso dyes]

53/00 Quinone imides
53/02 Indamines; Indophenols

55/00 Azomethine dyes
55/001 [Azomethine dyes forming a 1,2 complex metal compound, e.g. with Co or Cr, with another dye, e.g. with an azo or azomethine dye (for 1,1 complexes with other ligands, C09B 55/00)]
55/002 [Monoazomethine dyes]
55/003 . . . (with the -C=N- group attached to a heteroring)
55/004 . . . (with the -C=N- group between two heterorings)
55/005 . . [Disazomethine dyes]
55/006 . . . [containing at least one heteroring]
55/007 . . [containing only carbocyclic rings]
55/008 . . . [Tri or polyazomethine dyes]
55/009 . . . [Azomethine dyes, the C-atom of the group -C=N-being part of a ring (Image)]

56/00 Azo dyes containing other chromophoric systems
56/005 . . [Azo-nitro dyes]
56/02 Azomethine-azo dyes [(1,2-Complex dyes of AZOMETHINE and AZO dyes, C09B 55/001)]
56/04 Stilbene-azo dyes [(disazo dyes from diaminostilbene, C09B 35/215)]
56/06 . . Bis- or polystilbene azo dyes
56/08 . . Styryl-azo dyes
56/10 . . Formazane-azo dyes
56/12 Anthraquinone-azo dyes [(from diazotised amioanthracene C09B 29/002, azo dyes containing hydroxyl groups acylated with polyfunctional anthraquinone derivatives C09B 43/26)]
56/14 . . Phthalocyanine-azo dyes
56/16 . . Methine- or polymethine-azo dyes
56/18 . . Hydrazo-azo dyes
56/20 . . Triazene-azo dyes

57/00 Other synthetic dyes of known constitution
57/001 . . [Pyrene dyes]
57/002 . . [Aminoketone dyes, e.g. ary laminketone dyes (C09B 13/00 takes precedence)]
57/004 . . [Diketopyrrolopyrole dyes]
57/005 . . [Pyrocobine; Phthalocyanopyrocobine dyes]
57/007 . . [Squarine dyes]
57/008 . . [Triarylamine dyes containing no other chromophores]
57/02 . . Coumarine dyes
57/04 . . Isoindoline dyes
57/06 . . Naphtholactam dyes
57/08 . . Naphthalimide dyes; Phthalimide dyes
57/10 . . Metal complexes of organic compounds not being dyes in uncomplexed form
57/12 . . Perinones, i.e. naphtholene-aryl-imidazoles
57/14 . . Benzoxanthene dyes; Benzothioxanthene dyes

59/00 Artificial dyes of unknown constitution
61/00 Dyes of natural origin prepared from natural sources (e.g. vegetable sources)

62/00 Reactive dyes, i.e. dyes which form covalent bonds with the substrates or which polymerise with themselves
62/002 . . with the linkage of the reactive group being alternatively specified (not used)
62/0025 . . [Specific dyes not provided for in groups C09B 62/004 - C09B 62/018]
62/004 . . Anthracene dyes [(C09B 62/0068 takes precedence)]
62/006 . . Azodies
62/0061 . . . [with coupling components containing an amino directing group]
62/0062 . . . [with coupling components containing a hydroxyl directing group]
62/0064 . . . [with coupling components containing both hydroxyl and amino groups as directing groups]
62/0065 . . . [with coupling components containing a reactive methylene group]
62/0067 . . . [with heterocyclic compound as coupling component]
62/0068 . . . [dyes containing in the molecule at least one azo group and at least one other chromophore group]
62/008 . . Monoazo dyes
62/0081 . . . . [with coupling components containing an amino directing group]
62/0083 . . . . [with coupling components containing a hydroxyl directing group]
62/0085 . . . . [with coupling components containing both hydroxyl and amino groups as directing groups]
62/0086 . . . . [with coupling component containing a reactive methylene group]
62/0088 . . . . [with heterocyclic compound as coupling component]
62/01 . . . Disazo or polyazo dyes
62/012 . . . Metal complex azo dyes
62/014 . . . Nitro dyes
62/016 . . . Porphines; Azaporphines
62/018 . . . Formazane dyes
62/02 . . . with the reactive group directly attached to a heterocyclic ring
62/021 . . . [Specific dyes not provided for in groups C09B 62/024 - C09B 62/038]
62/022 . . . the heterocyclic ring being alternatively specified (not used)
62/024 . . . Anthracene dyes
62/026 . . . Azo dyes
62/0265 . . . . [Dyes containing in the molecule at least one azo group and at least one other chromophore group]
62/028 . . . Monoazo dyes
62/03 . . . Disazo or polyazo dyes
62/032 . . . . Metal complex azo dyes
Azo dyes

62/034 . . . Nitro dyes
62/036 . . . Porphines; Azaporphines
62/038 . . . Formazane dyes
62/04 . . . to a triazine ring
62/043 . . . [containing two or more triazine rings linked together by a non-chromophoric link]
62/046 . . . [Specific dyes not provided for in group C09B 62/06 - C09B 62/10]
62/06 . . . Anthracene dyes
62/08 . . . Azo dyes
62/082 . . . [dyes containing in the molecule at least one azo group and at least one other chromophore group]
62/085 . . . Monoazo dyes
62/09 . . . Disazo or polyazo dyes
62/095 . . . Metal complex azo dyes
62/10 . . . Porphines; Azaporphines
62/12 . . . to a pyrazidine ring
62/125 . . . [Specific dyes non provided for in groups C09B 62/14 - C09B 62/18]
62/14 . . . Anthracene dyes [(C09B 62/162 takes precedence)]
62/16 . . . Azo dyes
62/162 . . . [Dyes containing in the molecule at least one azo group and at least one other chromophore group]
62/165 . . . Monoazo dyes
62/17 . . . Disazo or polyazo dyes
62/175 . . . Metal complex azo dyes
62/18 . . . Porphyrins; Prophyrazins [(C09B 62/162 takes precedence)]
62/20 . . . to a pyrimidine ring
62/205 . . . [Specific dyes not provided for in groups C09B 62/22 - C09B 62/26]
62/22 . . . Anthracene dyes [(C09B 62/242 takes precedence)]
62/24 . . . Azo dyes
62/242 . . . [Dyes containing in the molecule at least one azo group and at least one other chromophore group]
62/245 . . . Monoazo dyes
62/25 . . . Disazo or polyazo dyes
62/255 . . . Metal complex azo dyes
62/26 . . . Porphyrins; Prophyrazins [(C09B 62/242 takes precedence)]
62/28 . . . to a pyrazine ring
62/285 . . . [Specific dyes not provided for in groups C09B 62/30 - C09B 62/34]
62/30 . . . Anthracene dyes [(C09B 62/322 takes precedence)]
62/32 . . . Azo dyes
62/322 . . . [Dyes containing in the molecule at least one azo group and at least one other chromophore group]
62/325 . . . Monoazo dyes
62/33 . . . Disazo or polyazo dyes
62/335 . . . Metal complex azo dyes
62/34 . . . Porphyrins; Prophyrazins [(C09B 62/322 takes precedence)]
62/343 . . . to a five membered ring
62/3435 . . . [Specific dyes not provided for in groups C09B 62/345 - C09B 62/357]
62/345 . . . Anthracene dyes
62/347 . . . Azo dyes
62/35 . . . Monoazo dyes
62/353 . . . Disazo or polyazo dyes
62/355 . . . Metal complex azo dyes
62/357 . . . Porphines; Azaporphines
62/36 . . . to some other heterocyclic ring
62/365 . . . [Specific dyes not provided for in groups C09B 62/38 - C09B 62/42]
62/38 . . . Anthracene dyes
62/40 . . . Azo dyes
62/405 . . . Monoazo dyes
62/41 . . . Disazo or polyazo dyes
62/415 . . . Metal complex azo dyes
62/42 . . . Porphines; Azaporphines
62/44 . . . with the reactive group not directly attached to a heterocyclic ring
62/4401 . . . [with two or more reactive groups at least one of them being directly attached to a heterocyclic system and at least one of them being directly attached to a non-heterocyclic system]
62/4403 . . . [the heterocyclic system being a triazine ring]
62/4405 . . . [Diozazine dyes]
62/4407 . . . [Formazane dyes]
62/4409 . . . [Anthracene dyes]
62/4411 . . . [Azo dyes]
62/4413 . . . [Non-metalized monoazo dyes]
62/4415 . . . [Disazo or polyazo dyes]
62/4416 . . . [Metal complex azo dyes]
62/4418 . . . [Porphines; Azoporphines]
62/442 . . . [the heterocyclic system being a pyridazine ring]
62/4422 . . . [the heterocyclic system being a pyrimidine ring]
62/4424 . . . [Azo dyes]
62/4426 . . . [the heterocyclic system being a pyrazine]
62/4428 . . . [the heterocyclic system being a five membered ring]
62/443 . . . the reactive group being alternatively specified
62/445 . . . Anthracene dyes
62/447 . . . Azo dyes
62/45 . . . Monoazo dyes
62/453 . . . Disazo or polyazo dyes
62/455 . . . Metal complex azo dyes
62/457 . . . Porphines; Azaporphines
62/463 . . . Formazane dyes
62/465 . . . the reactive group being an acryloyl group, a quaternised or non-quaternised aminomethyl carbonyl group or a (—N)"—CO—A—O—X or (—N)"—CO—A—Hal group, wherein A is an alkylene or alkylidene group, X is hydrogen or an acyl radical of an organic or inorganic acid, Hal is a halogen atom, and n is 0 or 1
Azo dyes

- Monoazo dyes
- Disazo or polyazo dyes
- Metal complex azo dyes
- Porphines; Azaporphines

- the reactive group being an esterified or non-esterified hydroxalkyl sulfonil or mercaptoalkyl sulfonyl group, a quaternised or non-quaternised aminooalkyl sulfonyl group, a heteroalkylmercapto alkyl sulfonil group, a vinyl sulfonil or a substituted vinyl sulfonil group, or a thiophene-dioxide group

- [Dioxazine dyes]
- [Formazine dyes]
- Anthracene dyes
- (C09B 62/5033, C09B 62/5036 take precedence)
- Azo dyes
- (C09B 62/5033, C09B 62/5036 take precedence)
- Monoazo dyes
- Disazo or polyazo dyes
- Metal complex azo dyes
- Porphines; Azaporphines

- the reactive group being an esterified or non-esterified hydroxalkyl sulfonil amido or hydroxalkyl amino sulfonil group, a quaternised or non-quaternised amino alkyl sulfonil amido group, or a substituted alkyl amino sulfonil group, or a halogen alkyl sulfonil amido or halogen alkyl amino sulfonil group or a vinyl sulfonlamido or a substituted vinyl sulfonamido group

- Anthracene dyes
- Azo dyes
- Monoazo dyes
- Disazo or polyazo dyes
- Metal complex azo dyes
- Porphines; Azaporphines

- the reactive group being an epoxy or halohydrin group

- Anthracene dyes
- Azo dyes
- Monoazo dyes
- Disazo or polyazo dyes
- Metal complex azo dyes
- Porphines; Azaporphines

- the reactive group being an ethylenimino or N—acylated ethylenimino group or a —CO—NH—CH—CH—X group, wherein X is a halogen atom, a quaternary ammonium group or O—acyl and acyl is derived from an organic or inorganic acid, or a beta—substituted ethylamine group

- Anthracene dyes
- Azo dyes
- Monoazo dyes
- Metal complex azo dyes
- Porphines; Azaporphines

- the reactive group being a N-methylol group or an O-derivative thereof

- Anthracene dyes
- Azo dyes
- Monoazo dyes

Disazo or polyazo dyes

Metal complex azo dyes

Porphines; Azaporphines

Anthracene dyes

Azo dyes

Metal complex azo dyes

Monoazo dyes

Disazo or polyazo dyes

Metal complex azo dyes

Porphines; Azaporphines

\[ C09B \]
Lakes; Mordants; Dyestuff preparations

67/0034 . . [Mixtures of two or more pigments or dyes of the same type]
67/0035 . . [Mixtures of phthalocyanines]
67/0036 . . [Mixtures of quinacridones]
67/0038 . . [Mixtures of anthraquinones]
67/0039 . . [Mixtures of diketopyrrolopyrroles]
67/004 . . [Mixtures of two or more reactive dyes]
67/0041 . . [mixtures containing one azo dye]
67/0042 . . [Mixtures containing two reactive dyes one of them being an azo dye]
67/0044 . . . . (both having the reactive group directly attached to a heterocyclic system)
67/0045 . . . . (both having the reactive group not directly attached to a heterocyclic system)
67/0046 . . [Mixtures of two or more azo dyes]
67/0047 . . [Mixtures of two or more reactive azo dyes]
67/0048 . . . . (all the reactive groups being directly attached to a heterocyclic system)
67/005 . . . . (all the reactive groups being not directly attached to a heterocyclic system)
67/0051 . . . . [mixture of two or more monoazo dyes]
67/0052 . . . . [Mixtures of two or more reactive monoazo dyes]
67/0053 . . . . (all the reactive groups being directly attached to a heterocyclic system)
67/0054 . . . . (all the reactive groups not being directly attached to a heterocyclic system)
67/0055 . . . . [Mixtures of two or more disazo dyes]
67/0057 . . . . [Mixtures of two or more reactive disazo dyes]
67/0058 . . . . (all the reactive groups are directly attached to a heterocyclic system)
67/0059 . . . . (all the reactive groups are not directly attached to a heterocyclic system)
67/006 . . [Preparation of organic pigments]
67/0061 . . . . (by grinding a dyed resin)
67/0063 . . . . (of organic pigments with only macromolecular substances)
67/0064 . . . . [of phthalocyanines with only macromolecular substances]
67/0065 . . . . [of organic pigments with only non-macromolecular compounds]
67/0066 . . . . [Aqueous dispersions of pigments containing only dispersing agents]
67/0067 . . . . [Aqueous dispersions of phthalocyanine pigments containing only dispersing agents]
67/0069 . . . . [Non aqueous dispersions of pigments containing only a solvent and a dispersing agent]
67/007 . . . . [Non aqueous dispersions of phthalocyanines containing only a solvent and a dispersing agent]
67/0071 . . . . (Process features in the making of dyestuff preparations; Dehydrating agents; Dispersing agents; Dustfree compositions]
67/0072 . . . . [Preparations with anionic dyes or reactive dyes]
67/0073 . . . . [Preparations of acid or reactive dyes in liquid form]
67/0075 . . . . [Preparations with cationic dyes]
67/0076 . . . . [Preparations of cationic or basic dyes in liquid form]
67/0077 . . . . [Preparations with possibly reduced vat, sulfur or indigo dyes]

67/0078 . . . . [Preparations of vat, sulfur or indigo dyes in liquid form]
67/0079 . . . . [Azoic dyestuff preparations]
67/0079 . . . . [Azoic dyestuff preparations]
67/0079 . . . . [Azoic dyestuff preparations]
67/008 . . . . [Preparations of disperse dyes or solvent dyes]
67/0082 . . . . . . [in liquid form]
67/0083 . . . . [Solutions of dyes]
67/0084 . . . . [Dispersions of dyes]
67/0085 . . . . [Non common dispersing agents]
67/0086 . . . . . . [anionic dispersing agents]
67/0088 . . . . . . [cationic dispersing agents]
67/0089 . . . . . . [non ionic dispersing agent, e.g. EO or PO addition products]
67/009 . . . . . . [polymeric dispersing agent]
67/0091 . . . . . . [Process features in the making of dispersions, e.g. ultrasonics]
67/0092 . . . . . . [Dyes in solid form]
67/0094 . . . . . . [Treatment of powders, e.g. antidusting]
67/0095 . . . . . . [Process features in the making of granulates]
67/0096 . . . . . . [Purification; Precipitation; Filtration]
67/0097 . . . . . . [Dye preparations of special physical nature; Tablets, films, extrusion, microcapsules, sheets, pads, bags with dyes]
67/0098 . . . . . . [Organic pigments exhibiting interference colours, e.g. nacreous pigments]

68/00 . . . . . . [Organic pigments surface-modified by grafting, e.g. by establishing covalent or complex bonds, in order to improve the pigment properties, e.g. dispersibility or rheology]
68/20 . . . . . . [characterised by the process features]
68/22 . . . . . . [Acid treatment (for acid pasting C09B 67/0015)]
68/24 . . . . . . [Azo-coupling]
68/26 . . . . . . [Oxidation]
68/28 . . . . . . [Complexing]
68/40 . . . . . . [characterised by the chemical nature of the attached groups]
68/41 . . . . . . [Polymers attached to the pigment surface (C09B 68/44, C09B 68/44 take precedence)]
68/42 . . . . . . [Ionic groups, e.g. free acid]
68/423 . . . . . . [Cationic groups]
68/4235 . . . . . . [Ammonium groups or derivatives thereof]
68/425 . . . . . . [Anionic groups]
68/4253 . . . . . . [Sulfonic acid groups]
68/4257 . . . . . . [Carboxylic acid groups]
68/427 . . . . . . [Ionic groups and at least one triazine ring present at the same time]
68/44 . . . . . . [Non-ionic groups, e.g. halogen, OH or SH]
68/441 . . . . . . [Sulfonic acid derivatives, e.g. sulfonic acid amides or sulfonic acid esters]
68/443 . . . . . . [Carboxylic acid derivatives, e.g. carboxylic acid amides, carboxylic acid esters or CN groups]
68/444 . . . . . . [Polyether]
68/446 . . . . . . [Amines or polyamines, e.g. aminopropyl, 1,3,4-triamino-pentyl or polyethylene imine]
68/447 . . . . . . [Alkyl groups]
68/4475 . . . . . . [Substituted alkyl groups]
68/449 . . . . . . [Unsaturated carbohydrates groups, e.g. alkenyl or alkiny]
68/4495 . . . . . . [Substituted unsaturated carbohydrates groups]
68/46 . . . . . . [Aromatic cyclic groups]
68/463 . . . [Substituted aromatic groups]
68/467 . . . [Heteroaromatic groups]
68/4673 . . . [5-Membered rings]
68/4677 . . . [6-Membered rings]
68/46775 . . . . [Triazine (C09B 68/427 takes precedence)]
68/48 . . . [Non-aromatic cyclic groups]
68/485 . . . [Substituted non-aromatic cyclic groups]
69/00 Dyes not provided for by a single group of this subclass
69/001 . . . [Dyes containing an onium group attached to the dye skeleton via a bridge]
69/002 . . . [Hydrazinium group]
69/004 . . . [Sulfonium group]
69/005 . . . [Isoniuronium group]
69/007 . . . [Dyestuffs containing phosphonic or phosphinic acid groups and derivatives]
69/008 . . . [Dyes containing a substituent, which contains a silicium atom]
69/02 . . . Dyestuff salts, e.g. salts of acid dyes with basic dyes (for Na, K or NH₄⁺ salts or for chlorides, sulfates or chlorozincates, see the relevant dye groups)
69/04 . . . of anionic dyes with nitrogen containing compounds
69/045 . . . . [of anionic azo dyes]
69/06 . . . . [of cationic dyes with organic acids {or with inorganic complex acids}]
69/065 . . . . [of cationic azo dyes]
69/08 . . . Dyestuffs containing a splittable water solubilising group [{dyes containing an onium group attached to the dye molecule via a bridge are to be considered as cationic dyes and are classified with the respective dyes such as C09B 44/02 - C09B 44/08; C09B 69/001 - C09B 69/005}]
69/10 . . . Polymeric dyes; Reaction products of dyes with monomers or with macromolecular compounds { {addition products of alkylene oxide to dyes, C09B 69/00; dyeing with polymeric dyes D06P 1/005a}]
69/101 . . . [containing an anthracene dye]
69/102 . . . . [containing a perylene dye]
69/103 . . . . [containing a diaryl- or triarylmethane dye]
69/104 . . . . [containing an indole dye, including melanine derivates]
69/105 . . . . [containing a methine or polymethine dye]
69/106 . . . . [containing an azo dye]
69/107 . . . . [containing an azomethine dye]
69/108 . . . . [containing a phthalocyanine dye]
69/109 . . . . [containing other specific dyes]