

BRITISH STANDARD 2015 : 1965

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CONFIRMED SEPTEMBER 1985

GLOSSARY OF PAINT TERMS

BRITISH STANDARDS INSTITUTION

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B.S. 2015 : 1965

THIS BRITISH STANDARD, having been approved by the Pigments, Paints and Varnishes Industry Standards Committee and endorsed by the Chairman of the Chemical Divisional Council, was published under the authority of the General Council on 2nd June, 1965.

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The Institution desires to call attention to the fact that this British Standard does not purport to include all the necessary provisions of a contract.

In order to keep abreast of progress in the industries concerned, British Standards are subject to periodical review. Suggestions for improvements will be recorded and in due course brought to the notice of the committees charged with the revision of the standards to which they refer.

A complete list of British Standards, numbering over 9,000, fully indexed and with a note of the contents of each, will be found in the BSI Catalogue which may be purchased from BSI Sales Department. The Catalogue may be consulted in many public libraries and similar institutions.

This standard makes reference to the following British Standards:

- B.S. 2000. Methods of test for petroleum and its products
Part 33. Flash point by the Abel apparatus (Statutory method)
Petroleum (Consolidation) Act 1928).
- B.S. 3483. Methods for testing pigments for paints.
- B.S. 3830. Specification for vitreous enamelled steel building components
- B.S. 3900. Methods of test for paints
Part A6. Determination of flow time by use of flow cups.
- B.S. 6088. Specification for solid glass beads for use with road marking compounds and for other industrial uses.'

British Standards are revised, when necessary, by the issue either of amendment slips or of revised editions. It is important that users of British Standards should ascertain that they are in possession of the latest amendments or editions.

The following B.S.I. references relate to the work on this standard:

Committee reference PVC/11

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CO-OPERATING ORGANIZATIONS

The Pigment, Paints and Varnishes Industry Standards Committee under whose supervision this British Standard was prepared consists of representatives from the following Government departments and scientific and industrial organizations:

Association of British Chemical Manufacturers
Board of Trade
British Colour Makers' Association
British Railways Board
Crown Agents for Oversea Governments and Administrations
D.S.I.R.—Building Research Station
D.S.I.R.—Laboratory of the Government Chemist
Incorporated Institute of British Decorators and Interior Designers
Lead Oxide Convention
London County Council
London Transport Board
Ministry of Aviation
Ministry of Defence, Army Department
Ministry of Defence, Navy Department
Ministry of Public Building and Works
National Federation of Builders' and Plumbers' Merchants
Oil and Colour Chemists' Association
Paintmakers Association of Great Britain
Paint Manufacturers and Allied Trades Association
Post Office
Research Association of British Paint, Colour and Varnish Manufacturers
Royal Institute of British Architects
Royal Institute of Public Health and Hygiene
Titanium Pigment Manufacturers' Technical Committee
White Lead Convention
Zinc Development Association
Zinc Pigment Development Association

B.S. 2015 : 1965

BRITISH STANDARD

GLOSSARY OF PAINT TERMS

FOREWORD

This British Standard was first published in 1953 with the object of defining the terms most widely used in the British paint industry. The standard was compiled by a special Sub-committee, the members of which were expert in their separate fields; a similar Sub-committee has prepared this revision, the main purpose of which has been to include additional terms now in use in the industry.

As in the previous edition, the present standard does not in general include definitions of materials used in the manufacture of paints or terms referring to manufacturing processes. Terms which may commonly be used in the paint industry in their ordinary dictionary sense have also been omitted. The standard includes a limited number of illustrations which it is felt may contribute to the written definitions.

GLOSSARY

Term	Definition
abrasion resistance	Resistance to frictional rubbing as distinct from resistance to knocks and impacts. Abrasion tests may be made by means of the finger alone, or with cloth or a pad with or without a mildly abrasive powder. The pressure, speed and time of rubbing as well as the character of the rubbing agent should be controlled when making comparisons of abrasion resistance.
accelerated weathering	See 'artificial weathering'.
accelerator	Any substance which increases the speed of a chemical reaction, e.g. in the paint industry the term usually indicates materials that hasten the curing or cross-linking of a resin system; in the polyester resin field it covers more specifically an additive which accelerates the action of the catalyst, (See also 'activator', 'catalyst' and 'crosslinking agent'.)
acid resistant paint	A paint designed to resist attack by strong acids, such as sulphuric acid battery electrolyte. The term is of little value unless it is referred to some standard of performance under specified conditions (cf. 'alkali resistant paint').
acoustic material	A soft or aerated material lightly bound or bonded to form a soft, absorbent coating or fabricated slab for the purpose of eliminating echoes. Special care should be taken in decorating to avoid modification of acoustic properties.
acrylic resin	A synthetic resin of the thermoplastic type made by the polymerization of an acrylic compound, e.g. methyl acrylate, methyl methacrylate. (See also 'vinyl resin'.)
activator	A substance added in small quantity to another to promote its activity, e.g. traces of silver or copper can promote the luminescence of zinc sulphide pigments in luminous paints and peroxides which are added to polyesters are sometimes called activators.
adhesion	The degree of attachment between a paint or varnish film and the underlying material with which it is in contact. The latter may be another film of paint (adhesion between one coat and another) or any other material such as wood, metal, plaster, etc. (adhesion between a coat of paint and its substrate). Adhesion should not be confused with 'cohesion' (q.v.).
advancing colours	Colours that give the illusion of being closer to the eye than their complementary colours when both are adjacent and in the same plane; colours ranging from yellow-green to scarlet are of this character. (See also 'receding colours'.)

B.S. 2015 : 1965

Term	Definition
after tack	A film defect in which the painted surface, having once reached a tack-free stage, subsequently develops a sticky condition. The effect may be due to syneresis (i.e. expulsion of liquid from a gel) of the less polymerized oil or even of oxidation products.
ageing	The change, if any, occurring in a material on standing under defined conditions at or near ambient temperature. It is used in particular in connection with dry films.
air-drying	See 'drying'.
airless spraying	The process of atomization of paint by forcing it through an orifice at high pressure. This effect is often aided by the vaporization of the solvents especially if the paint has been previously heated. The term is not generally applied to those electrostatic spraying processes which do not use air for atomization.
alkali resistant paint	A paint designed to resist attack of strong alkalis, such as potassium hydroxide battery electrolytes. The term is of little value unless it is referred to some standard of performance under specified conditions (cf. 'acid resistant paint').
alkyd resin	A synthetic resin made by condensation between a polyhydric alcohol such as glycerol, and a polybasic acid such as phthalic acid (normally used in the form of the anhydride). Modifying agents may be incorporated to influence the properties of the resulting product. Thus, the inclusion of acids from a vegetable drying oil such as linseed oil, in place of some of the phthalic anhydride, gives a resin soluble in the organic solvents usually used in paints and varnishes. By varying the types and ratios of the polyhydric alcohols and carboxylic acids, an almost infinite number of different resins can be made, some of which may be used as the sole film-forming agents or as film-forming ingredients with materials such as nitrocellulose. (See 'long oil'; 'short oil'.)
alligatoring	See 'cracking'.
aluminium primer	A primer containing a proportion of aluminium pigment. It should be distinguished from an aluminium paint in which the aluminium is designed to float to the top of the film giving metallic brilliance, a feature undesirable in a primer. Aluminium primers are especially valuable on resinous timber or timber which has been treated with oil soluble wood preservatives. This term must not be confused with a primer for aluminium.

B.S. 2015 : 1965

Term	Definition
amino resin	A synthetic resin of the thermo-setting type made by the reaction of urea, thiourea, melamine, or allied compounds usually with formaldehyde. Amino resins are usually cured by stoving and are blended with other resins (e.g. alkyds or epoxies) to make paints for motor cars and other metal articles. Amino resins are also cured by chemical means at normal air temperature, e.g. in wood finishes.
anti-condensation paint	A paint designed to minimize the effects of condensation of moisture under intermittently dry and humid conditions. Such a material normally has a matt textured finish and frequently contains cork or some other heat-insulating material as a filler.
anti-corrosive paint or composition	A paint used for preventing the corrosion of metals and, more particularly, a paint specially formulated to prevent the rusting of iron or steel.
anti-fouling composition	A paint-like composition used to prevent the growth of barnacles and other organisms on ships' bottoms. It usually contains substances which are poisonous to such organisms in the early stages of growth. Such compositions are applied over protective paints e.g. over anti-corrosive paints in the case of steel ships.
anti-settling agent SUSPENDING AGENT	A substance incorporated in paint to delay the formation of sediment and to maintain uniform consistency during storage or, as in dipping paints, during painting operations.
anti-skinning agent	Any material added to a paint with a view to preventing or retarding the processes of oxidation or polymerization which result in the formation of an insoluble skin on the surface of the paint in a container.
antiseptic wash	See 'fungicidal wash'. The use of the term 'antiseptic wash' is deprecated.
artificial weathering ACCELERATED WEATHERING	Laboratory tests designed to simulate but at the same time to intensify and accelerate the destructive action of natural outdoor weathering on paint films. The tests involve exposure to artificially produced components of natural weather, e.g. light, heat, cold, water vapour, rain, etc., which are arranged and repeated in a given cycle. There is no universally accepted test and different investigators use different cycles.

B.S. 2015 : 1965

Term	Definition
assertive colours	Colours that excite or stimulate attention owing to their comparative brilliance or high chroma.
bactericidal paint	A bactericidal paint discourages the multiplication of bacteria on its dry applied film. The bactericidal properties are normally conferred by the use of special additives.
baking	See 'stoving'.
ballotini	Very small transparent glass spheres having optical properties such that when backed by a suitable paint, incident light is reflected back in the general direction of the source. Ballotini are incorporated in, or superimposed on, paint films or plastic coatings to give increased visibility, <u>for example, in signs illuminated by car headlamps.</u> (cf. B.S. 6088*) (See also 'reflectorization'.)
barrelling	See 'rumbling'.
barrier coat	A coating used to isolate a paint system from the surface to which it is applied in order to prevent chemical or physical interaction between them, e.g. to prevent the paint solvent attacking the underlying paint or to prevent bleeding from underlying paint or material.
Berlin black	A name applied to a pigmented form of 'Brunswick black' (q.v.) producing a semi-gloss film.
binder	The non-volatile portion of the vehicle of a paint; it binds or cements the pigment particles together, and the paint film as a whole to the material to which it is applied.
blitty	The description applied to a paint or varnish containing bits of skin, gel, flocculated material or foreign particles, which project above the surface when the paint or varnish is applied in a manner appropriate to its type and purpose. The term 'peppery' is sometimes used when the bits are small and uniformly distributed. The term 'seedy' specifically denotes bits which have developed in a paint or varnish during storage.
bituminous paint BITUMEN PAINT	Originally a paint from the class of paints consisting essentially of natural bitumens dissolved in organic solvents: they may or may not contain softening agents, pigments and inorganic fillers. It is usually black or dark in colour. By extension the term is applied also to dried films.

****B.S. 6088, 'Specification for solid glass beads for use with road marking compounds and for other industrial uses'.**

Term	Definition
	Within recent years the term 'bituminous' has, by common usage, come to include bitumen-like products such as petroleum asphalt; it is not recommended that the term should be used for paints based on coal tar or coal tar pitch. These are more generally known as 'black varnish' (q.v.) or 'black paint (coal tar base)'.
black japan	A black material, akin to a normal oil varnish, containing a drying oil and gilsonite or other asphaltic material. It dries by oxidation to a hard glossy film in which the gilsonite may be regarded as replacing the copal resin in a normal varnish. A good black japan can be varnished over without bleeding of the gilsonite.
blast cleaning	The cleaning and roughening of a surface by the use of natural grit or artificial 'grit' or fine metal shot (usually steel), which is projected on to a surface by compressed air or mechanical means.
black varnish	Black varnishes used in the electrical industry for impregnation of electrical components, which include drying oils and/or synthetic resins in combination with bituminous substances such as petroleum residues and/or gilsonite but not normally coal tar.
bleaching	1. Loss of colour of a paint or varnish. This may be due to internal chemical or physical action in the paint itself, to influences from the surface on which it is applied or to weathering or contamination from the atmosphere. (See also 'fading' and 'whitening in the grain'.) 2. The intentional lightening of the colour of a material, usually wood in the decorating trade. It can be done on new or old untreated timber or on previously painted or stained wood after stripping. Oxalic acid is most often used by painters although excellent proprietary brands of bleaching solutions are now available.
bleeding	The process of diffusion of a 'soluble' coloured substance from, into, and through a paint or varnish coating from beneath, thus producing an undesirable staining or discoloration. Examples of 'soluble' materials which may give rise to this defect are certain types of the following classes of materials: bituminous paints, wood preservatives, pigment dyestuffs and stains.
blistering	The formation of dome-shaped projections or blisters in paints or varnish films by local loss of adhesion and lifting of the film from the underlying surface. Such blisters may contain liquid, vapour, gas or crystals.

B.S. 2015 : 1965

Term	Definition
bloom	A deposit like the bloom on a grape which sometimes forms on glossy enamel, paint or varnish films, causing loss of gloss and dulling of the colour. Sometimes bloom may be removed by wiping with a damp cloth.
blowing	(Of plaster.) The appearance on the surface of the plaster of conical hollows (pops or blows). They are due to the presence of particles of reactive material which expand, after the plaster has set, with sufficient force to push out the plaster in front of the particles. They may occur in undercoats or finishing coats of plaster, or both.
blown oil	Vegetable oil which has been partially oxidized by blowing with a current of air whilst at an elevated temperature. The characteristics of the oil such as its increased viscosity and degree of oxidation can be controlled by the time, the temperature and the amount of air.
blueing	Neutralizing the yellow cast of certain white pigments or paints by adding a trace of blue, thereby increasing apparent whiteness.
blushing	A milky opalescence which sometimes develops as a film of lacquer dries and is due to the deposition of moisture from the air and/or precipitation of one or more of the solid constituents of the lacquer; usually confined to lacquers which dry solely by evaporation of solvent.
bodied oil	An oil of increased viscosity produced by any means e.g. 'blown oil' (q.v.), 'stand oil' (q.v.).
body	1. The apparent viscosity of a paint or varnish as assessed subjectively when applying an undefined shearing force, e.g. when pouring the material from a can, stirring it or brushing or otherwise spreading it over a surface. If the apparent viscosity is high and remains so under ordinary conditions of application, the material is said to be 'full-bodied' or 'heavy-bodied' (q.v.); material having a low apparent viscosity is said to be 'light-bodied'. 2. The 'build' (q.v.) or the solidity of a paint or varnish film.
bodilying	An increase in the apparent viscosity of a paint, varnish, resin or lacquer, which occurs either deliberately during manufacture or adventitiously during storage.

B.S. 2015 : 1965

Term	Definition
bodying up	A term mainly used in wood polishing processes. In French polishing it refers to the building up of a transparent film of shellac of substantial thickness, essentially by pad application, prior to the final 'spiriting off'.
boiled oil	Linseed oil which has been heated, usually by steam jacket, and perhaps lightly blown with air, and to which driers have been added.
break	(Of oils.) The separation of mucilaginous product which occurs when certain unrefined vegetable oils are heated. This appears as a hazy suspension which may coagulate into a spawn-like mass. The separated material generally remains insoluble, and cannot be re-dissolved in the oil, even on prolonged heating. When separation occurs, the oil is said to 'break'. The insoluble matter is also referred to as the 'break' or 'mucilage'.
bridging	The covering over of an unfilled gap such as a crack or corner with a film of paint. This introduces a weakness in the coating which may lead to an eventual cracking of the dried paint.
bring forward	In repainting. To repair local defective areas with the appropriate paints so as to bring them into conformity with the surrounding areas before applying the finishing coats.
broken colour	General multi-coloured effect brought about by the automatic merging of wet paints of various colours or by manipulation which produce apparently accidental effects.
broken white	An 'off-white' (q.v.) in which the initial pure whiteness of the principal pigment has been very slightly 'broken' or modified in a yellow or brown direction.
bronze paste	A paste consisting of fine metallic flakes in a volatile medium, usually white spirit. It is used in combination with media to make metallic and polychromatic paints. The metal may be aluminium, copper or alloys of copper.
bronzing	A characteristic metallic lustre shown by certain highly coloured pigments in full strength, e.g. certain Prussian and phthalocyanine blues.
bronzing lacquer	A transparent lacquer for application to bright metal in order to preserve lustre and enrich colour.
bronzing medium or liquid	A vehicle, either a varnish or a lacquer, which is specially formulated for use as a binder with aluminium or gold-bronze powders.

B.S. 2015 : 1965

Term	Definition
Brunswick black	A solution normally consisting of gilsonite, petroleum pitch, or similar material, in white spirit or aromatic hydrocarbons. It dries to a glossy, often brittle film, by simple evaporation of the solvents.
brush filler	A composition for application by brush for filling the grain or fine cracks and indentations to obtain, after rubbing down, a smooth even surface preparatory to painting. (See 'filler'.)
brush graining	The process of producing a texture resembling the straight grain of wood by manipulating a scumble or glaze over a painted opaque groundwork with suitable brushes (as distinct from the more imitative graining with accessory tools).
brush marks	Ridges in a dried paint film left by the brush.
bubbling	A film defect, temporary or permanent, in which bubbles of air or solvent vapour, or both, are present in the applied film.
build	The thickness (either real or apparent) of a dry paint or varnish film.
burning off	The removal of paint by a process in which the paint is softened by heat, e.g. from a flame, and then scraped off while still soft.
caking	The settling of pigment particles of a paint into a compact mass which is not easily re-dispersed by stirring.
calchmine	Originally, a form of distemper or colour wash based on calcium sulphate (a term originating from the U.S.A.), but now more generally used to describe non-washable distempers supplied in the form of dry powders to which water is added by the user.
catalyst	Strictly speaking, a substance which increases the rate of a chemical reaction, but which remains itself chemically unchanged at the end of the reaction. The term is frequently, but in the strict sense erroneously, employed to cover those additives that enter into the reaction, as in the curing by chemical crosslinking of resins, e.g. the amine or polyamide added to an epoxy resin is frequently spoken of as the catalyst. See 'accelerator' and 'crosslinking agent'.
cement paint	A paint based essentially on Portland cement, supplied as a dry powder, for mixing with water immediately before use.

Term	Definition
chalking	The formation of a friable, powdery coating on the surface of a paint film caused by disintegration of the binding medium due to disruptive factors during weathering. The chalking of a paint film can be considerably affected by the choice and concentration of the pigment.
checking	See 'cracking'.
cheesy	The character of a paint or varnish film which although dry is mechanically weak and rather soft.
chilling	1. The subjection of paints and varnishes to low temperatures, resulting in a deterioration of their normal characteristics. 2. In varnish manufacture, the deliberate and rapid reduction of the temperature of the charge in a varnish pot.
china wood oil	See 'tung oil'.
chipping	1. The removal of paint, or rust and scale, by mechanical means. 2. The total or partial removal of a dried paint film in flakes by accidental damage.
chip resistance	The resistance of a paint film to localized damage caused by impact; applied particularly to the resistance of a car body finish to stones and grit.
chlorinated rubber	Rubber which has been chlorinated to increase its solubility in organic solvents. The paints made from chlorinated rubber have a high degree of chemical and water resistance.
chroma	See 'colour'.
chromating	Treatment of light alloys by chemical solutions normally containing chromic acid and/or chromates in a suitable acid medium. This treatment modifies the surface to give improved protection against corrosion and to serve as a good base for subsequent paint coats.
cissing	A defect in which a wet paint or varnish film recedes from small areas of the surface leaving either no coating or an attenuated one.
clearcole CLAIRCOLLE	Glue size in appropriate dilution with the addition of a small quantity of whiting. It is used to reduce the porosity of ceilings and other surfaces prior to the application of size-bound distemper.

B.S. 2015 : 1965

Term
clouding**Definition**

The development in a clear varnish or lacquer film or liquid of an opalescence or cloudiness caused by the precipitation of insoluble matter.

coat

The paint, varnish or lacquer applied to a surface in a single application to form a properly distributed film when dry. A paint system usually consists of a number of coats separately applied in a predetermined order at suitable intervals to allow for drying. It is possible with certain types of material, to build up paint systems of adequate thickness and opacity by a more or less continuous process of application, e.g. wet on wet spraying. In this case no part of the system can be defined as a separate coat in the above sense.

Full coat. As thick a coat of paint, varnish or lacquer as can be applied in any one operation (brush or spray) consistent with the production of a film of uniform appearance, satisfactory hardness, etc., when dry.

Glaze coat. A translucent or semi-transparent coating, sometimes coloured. It may be either an intermediate or the final coat of a paint system. It is frequently applied thinly as the object is to modify but not obscure the ground colour.

Ground coat. A coat of paint having good opacity which is applied before a glaze coat or scumble. The final colour effect when glazed is dependent on the mutual influence of the ground coat and the glaze coat.

Guide coat. A very thin coat of loosely bound paint applied over a continuous coating of surfacer or filler, prior to rubbing down. It is completely removed during the rubbing operation but, as it first disappears from the higher spots and ridges, it serves as a guide to the operator in producing a smooth surface.

Mist coat. 1. A very thin coat applied by spraying, more particularly in connection with cellulose lacquers. In some cases it may form a 'fogged' coat or non-continuous film.
2. A thin coat of volatile thinners, with or without a small amount of lacquer, which is sometimes sprayed over a dry lacquer film to improve the smoothness and lustre.

Round coat. A full coat of a heavy bodied paint or varnish.

Sealing coat. See 'sealer'.

Sharp coat. A coat of white lead in oil thinned liberally with turpentine or white spirit. A sharp coat used for treating new plaster following the trowel is frequently referred to as 'sharp colour'.

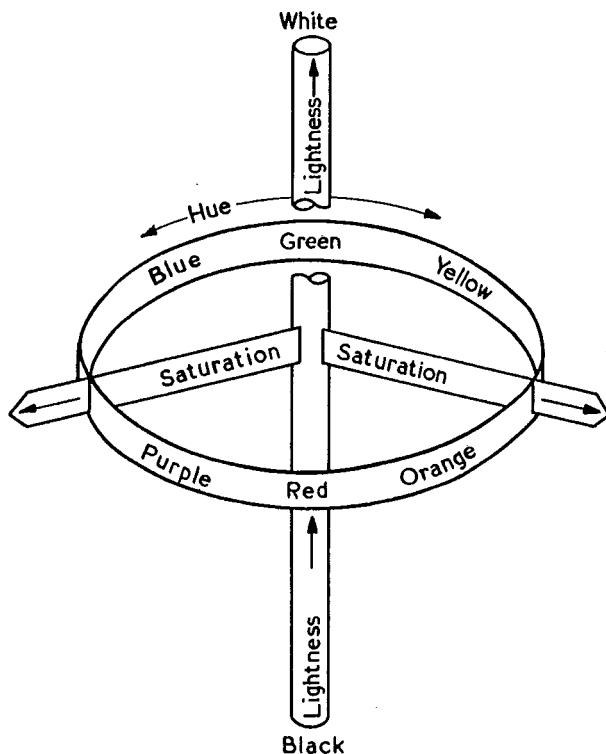
Term	Definition
cobwebbing	The production of fine filaments instead of the normal 'atomized' particles when some solutions of certain classes of high polymers are sprayed. It may be reduced to a minimum and often virtually eliminated by careful selection of solvents and proper adjustment of spraying conditions. Although cobwebbing is generally considered a defect in ordinary lacquers, use is made of this property to provide a protective covering for equipment such as aeroplane engines, etc. during storage. A cocoon is formed around the article by the pronounced cobwebbing action of lacquers specially prepared from certain high polymers. A durable, true film-forming lacquer is then sprayed over the cocoon which acts as a support.
cohesion	The forces which bind the particles of a paint or varnish film together into a coherent whole. It is distinct from 'adhesion' (q.v.), the forces binding the film to its substrate.
cold checking	The development of hair cracks in a lacquer film when it is subjected to a 'cold check' test, e.g. when a furniture lacquer is subjected to defined cycles of alternating cold and normal temperatures.
cold cracking	The cracking or checking of paint, varnish or lacquer films caused by sudden or repeated reduction in the temperature of the film.
cold-curing	The process of curing at normal atmospheric temperature.
colophony	See 'rosin'.
colour	The colour of a surface can most instructively be considered in terms of its three chief qualities, hue, lightness and saturation. In ordinary speech many terms are used, rather loosely, to describe colour, e.g. pale blue, or dark red. The various organizations concerned with the measurement or specification of colour have drawn up more precise systems of colour terminology (see, for instance, B.S. 1611, 'Glossary of colour terms used in science and industry'). The basis of most of these systems is that the colour of a surface has three chief qualities, 'hue', 'lightness' and 'saturation'; these qualities together define the position of the colour in an orderly arrangement of all possible colours. An arrangement of this type is illustrated in the diagram on the next page.

B.S. 2015 : 1965

Term**Definition**

Hue. Colours are first divided into groups having the same hue, i.e. into reds, yellows, greens, blues, purples, etc. Almost all systems of colour terminology use the term hue in this sense, but in ordinary speech this quality is often loosely called colour. In the diagram, the hue of a colour determines its angular position around the central axis, reds falling in one sector, oranges in the next, and so on, all falling in systematic order following the rainbow or spectrum sequence.

Lightness. The lightness of a colour is determined by the proportion of light which it reflects, irrespective of hue and saturation. Corresponding terms used are 'value', 'reflectance value'.



In the diagram, the lightness of colour determines its elevation or height up the central axis or in a line parallel to this axis, black being at the bottom, white at the top.

Term	Definition
	Saturation. Colours of similar hue and lightness may differ in colourfulness or intensity of colour. This quality is termed saturation and may be defined as the intensity of any particular hue when compared with a neutral grey of similar lightness, the spectrum colours being the most intense or of highest saturation. The terms '<i>chroma</i>' and '<i>intensity</i>' are also used in a similar sense. In the diagram, the saturation of a colour determines its distance away from the centre axis, colours of the highest saturation being furthest from the axis and black, grey and white lying along the axis.
colour floating	See 'floating'.
colour match	Paints are said to match in colour if under specified conditions of illumination and viewing, no significant difference in their hue, saturation and lightness can be detected. Spectral match. Paints are spectral matches if at each wavelength of the visible spectrum their reflectances are the same; a spectral match holds good for all illuminants and observers. Metameric match. Colours which match under one illuminant but have different spectral reflectance curves are metameric matches only, the phenomenon being known as '<i>metamerism</i>'. Metameric matches, in general, no longer hold good if there is a change in the illuminant, e.g. from daylight to tungsten lamp light.
colour wash	Earth pigments, with or without whitening, lightly bound in glue size so as to facilitate ready removal since frequent removal is necessary, e.g. tinted lime wash.
combing	The act of partially removing a coat of wet paint with combs to imitate the grain of wood or other pattern.
compatible	- Two or more paints or varnishes which can be mixed without producing any undesirable effects such as precipitation, coagulation, gelling, are said to be compatible. - Different coats of paint which can be associated in a painting system or other coating systems without producing undesirable effects are said to be compatible.
consistency	The apparent viscosity of a paint or varnish when shearing forces of varying degrees are applied to it in various ways, e.g. when it is stirred in the can, poured from one vessel to another or brushed (or otherwise spread out) over a surface. (See also 'body'.)

B.S. 2015 : 1965

Term	Definition
convection oven stoving	See 'stoving'.
copal	Natural resins formed from the exudation of various tropical trees. The hard fossil types were the basis of copal varnishes, the softer types frequently obtained by the tapping of live trees being mostly used for spirit varnishes. Congo copal is the main surviving member of the fossil class, Manila copal that of the spirit soluble class.
copolymer	See 'polymer'.
covering power	The use of this term has given rise to confusion of thought as between the act of 'spreading out' and 'covering up' (or hiding) respectively. It is consequently falling into disuse and being replaced by the terms 'spreading capacity' (q.v.) and 'hiding power' (see 'opacity') respectively.
cracking	Generally, the splitting of a dry paint or varnish film, usually as a result of ageing. The following terms are used to denote the nature and extent of this defect: <i>Hair-cracking.</i> Fine cracks which do not penetrate the top coat; they occur erratically and at random. <i>Checking.</i> Fine cracks which do not penetrate the top coat and are distributed over the surface giving the semblance of a small pattern. (See Fig. 1.) <i>Cracking.</i> Specifically, a breakdown in which the cracks penetrate at least one coat and which may be expected to result ultimately in complete failure. (See Fig. 2.) <i>Crazing.</i> Resembles checking but the cracks are deeper and broader. (See Fig. 3.) <i>Crocodiling or alligatoring.</i> A drastic type of crazing producing a pattern resembling the hide of a crocodile. (See Fig. 4.)
crackle finish	See 'finish'.
cratering	The formation of small bowl-shaped depressions in a paint or varnish film.
crawling	A pronounced form of 'cissing' (q.v.)
crazing	See 'cracking'.
creeping	The spontaneous spreading of a liquid on a surface. In the case of an applied film of paint, varnish or lacquer it refers to the spread of the wet film beyond the area to which it was applied.

Term	Definition
crinkling	The development in a film of paint or varnish during its formation, of ridges and furrows. These vary in size and frequency with the composition of the film and conditions during film formation including temperature and contamination of the atmosphere. This term is synonymous with 'wrinkling'.
crocodiling	See 'cracking'.
crossing	A method of obtaining even distribution of paint by means of a brush whereby the direction of brushing each series of strokes lies at right angles to that of the previous series. In the case of oil paints the pressure applied should be progressively reduced.
crosslinking agent	A substance which will react chemically with the molecular chains of a thermoplastic material and by linking them together create a more rigid structure resulting in a more or less infusible product.
crowsfooting	A type of film defect where small wrinkles occur in a pattern resembling that of a crow's foot. (See 'wrinkling'.) See Fig. 5.
crystallizing finish	See 'finish'.
curing	The process of condensation or polymerization of a material by heat or chemical means, resulting in the full development of desirable properties.
curing agent	An additive which promotes the curing of a film (see also 'catalyst' and 'crosslinking agent').
curtain coating	A method of applying paint to an object by moving it through a falling curtain of paint.
curtaining	See 'sagging'.
cutting in	The painting of a surface adjacent to another surface which must not be painted, for example, painting the frames of a window and avoiding painting the glass, or the painting of an area on a previously painted surface.
de-leafing	Loss of leafing (q.v.) of metallic pigments in paints, giving rise to reduced metallic lustre.
de-nib	To remove, by fine abrasive paper, small particles of foreign matter which stand proud on the surface of a paint film.

B.S. 2015 : 1965

Term	Definition
de-scaling (scaling)	The removal of mill scale or caked rust from steel by mechanical means, sometimes assisted by flame cleaning.
dilatancy	Used generally, but incorrectly, to describe the property of any paint or pigment paste which thickens on shearing. This general behaviour is more correctly shear thickening, dilatancy being a more specialized phenomenon where thickening is accompanied by an increase in volume.
diluent	A volatile liquid, which while not a solvent for the non-volatile constituents of a varnish or lacquer, may yet be used in conjunction with the true solvent, without causing precipitation.
dipping	1. The process of applying paints, etc., by immersing therein an object to be coated and allowing it to drain during and after removal. 2. The description of a preparation suitable for this method of application, e.g. a 'dipping' lacquer.
dispersion	A two-phase system in which one phase, called the disperse phase, is permanently distributed as small particles through the second phase called the continuous phase.
distemper	Although there is a tendency to apply this term to all interior water paints used for house decoration, it should preferably be used solely to describe the earlier types of such products, namely those in which the binding medium consists essentially of either glue or casein or similar sizing material. (See also 'water paint'.)
dope	A class of lacquer-like materials used in the coating of textiles and leather. In particular, aeroplane dope is used in the aircraft industry for tautening and protecting stretched linen fabric.
drag (brush drag)	Resistance to the bristles encountered when applying paint by brush. Excessive drag may be a serious fault in a paint or varnish. (See also 'pulling'.)
driers	Substances which, when incorporated in relatively small proportions in drying oils, or in paints or varnishes based on drying oils, bring about an appreciable reduction of their drying times at ordinary temperatures. These substances are usually compounds of lead, manganese or cobalt.

Term	Definition
	<i>Soluble driers.</i> Driers which are more or less readily soluble at ordinary temperatures in drying oils, hydrocarbon solvents and the like. Usually they consist essentially of metallic salts of organic acids such as the resinates, linoleates or naphthenates of lead, manganese or cobalt. <i>Liquid driers.</i> Solutions of 'soluble driers' in volatile organic solvents, usually hydrocarbons. <i>Paste driers.</i> (Also known as patent driers.) Driers made by grinding suitable compounds of lead and manganese with a small amount of water, linseed oil and Paris white, with or without other mineral extenders, to form a stiff paste. They are still sometimes used by painters when mixing their own linseed oil paints, but are now largely superseded by soluble and liquid driers. <i>Siccative.</i> Synonymous term for 'drier', little used in the United Kingdom. <i>Terebine driers.</i> (See 'terebine'.)
dry colours	A term used loosely to describe dry coloured pigments (including black but excluding white).
drying	The process of change of a coat of paint or varnish from the liquid to the solid state, due to evaporation of solvent, physico-chemical reactions of the binding medium, or a combination of these causes. When the drying process takes place during exposure to air at normal temperatures, it is called 'air drying'; if it is accelerated by the application of a moderate degree of heat (normally not exceeding 150°F) it is termed 'forced drying', as distinct from 'stoving', (q.v.). Various successive stages in the drying of a paint or varnish film are distinguished by qualifying terms (with corresponding drying times) as follows: <i>Dust dry.</i> When dust no longer adheres to the paint surface. <i>Surface dry.</i> When the paint is dry on the surface but is soft and tacky underneath. This condition is also commonly described as 'sand dry'. <i>Touch dry.</i> When a very slight pressure with the fingers does not leave a mark or reveal stickiness. <i>Tack free.</i> Free from stickiness even under pressure. <i>Hard dry.</i> When the drying has reached such a stage that if desired a further coat can be satisfactorily applied by brushing, if necessary, after flattening. The term is also used to describe certain degrees of film hardness when tested by specified methods. <i>Dry to handle.</i> When the paint surface is sufficiently hardened to be freely handled without damage.

B.S. 2015 : 1965

Term	Definition
drying oil	An oil, usually of vegetable origin of which linseed (q.v.) and tung oil (q.v.) are the commonest examples, having the property of hardening by oxidation to a tough film, when exposed in the form of a thin layer to air.
dry spray	The production of a rough or slightly bitty film caused by an atomized paint, the particles being insufficiently fluid to flow together to form a uniform coating.
drying time	The time which elapses between the application of a coat of paint and the attainment of a specified dry state. (See 'drying'.)
dual-pack	See 'two-pack'.
durability	The degree to which paints and paint materials withstand the destructive effect of the conditions to which they are subjected.
dust dry	See 'drying'.
dyes and dyestuffs	Organic colouring substances. Pigment dyestuffs are virtually insoluble in water and in the usual paint and varnish vehicles. Some examples of pigment dyestuffs are toluidine red, phthalocyanine blue and arylamide yellow. Some dyes are soluble in water and organic solvents and are classed according to their solubilities for example 'water soluble dyes'; 'spirit soluble dyes' and 'oil soluble dyes'.
earth colours	A pigment of the class of pigments which are usually mined directly from the earth, dried and ground. They are frequently also termed 'natural pigments' or 'mineral pigments'. Most earth pigments consist of complex mixtures of iron or manganese oxides with aluminium silicates. Typical examples are red and yellow oxides of iron, yellow ochre, raw sienna, raw umber.
efflorescence	The development of a crystalline deposit on the surface of brick, cement, etc., due to water, containing soluble salts, coming to the surface, and evaporating so that the salts are deposited. In some cases, the deposit may be formed on the top of any paint film present, but usually the paint film is pushed up and broken by the efflorescence under the coat. (See Fig. 6.)
eggshell	See 'gloss'.