# भारतीय मानक Indian Standard

# ब्रशवेयर उद्योग — पारिभाषिक शब्दावली

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(पहला पुनरीक्षण)

# Brushware Industry — Glossary of Terms

(First Revision)

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Brushware, Polishes, Lac, Lac Products Sectional Committee, CHD 23

# **FOREWORD**

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Brushware, Polishes, Lac, Lac Products Sectional Committee had been approved by the Chemical Division Council.

This standard was first published in 1969 to eliminating the ambiguity and confusion arising from different interpretation of terms used in brushware trade and industry and to establish a generally recognized usage.

This first revision has been taken up in order to update the terminologies being used in brushware trade and industry.

The composition of the Committee, responsible for the formulation of this standard is given in Annex A.

# Indian Standard

# BRUSHWARE INDUSTRY — GLOSSARY OF TERMS

(First Revision)

#### 1 SCOPE

This standard defines the terms relating to brushware trade and industry.

#### 2 TERMINOLOGY

- **2.1 Abfall** One of the group of German or polish-dressed bristles.
- **2.2 Adulterants** Unspecified material present in the brush-filling material.
- 2.3 African Piassava see 2.43.1.1
- 2.4 Aloe see 2.43.1.2
- **2.5 Anchorage** A term used in brush industry to denote the gripping or setting of the filling materials in the ferrule, stock or board of the brush.
- **2.6 Anthrax** It is a fatal disease in certain animals and may be conveyed to persons handling the hides, wool, hairs or bones of animals which have died from this disease.
- **2.7 Back** That part of the brush or broom which covers the board, wherever required, and mainly used for hand-made brushes.
- **2.8 Ball Cut** When the filling material in a finished brush is cut in spherical shape.
- **2.9 Bass** Fibres obtained from the lead, stalk and barm or palm.
- **2.10 Bassine** see **2.43.1.3**
- **2.11 B.B.** An abbreviated term used for best, black, Indian bristles. For bristles to qualify under this classification, they have to be jet black.
- **2.12 Benzene-Alcohol Test** Test generally used for assessing the performance of setting.
- **2.13 Bevelled Edge** A type of finish of the working edge essential for satisfactory performance of certain types of brushes.
- **2.14 Bleaching** The process of improving the appearance of a brush filling material without adversely affecting its other properties.
- **2.15 Block** The thick timber piece used for the filling material of a pan set or a machine-made brush.
- **2.16 Blueing Agent** Certain dyes like methyl violet are added in the final rinsing water after

bleaching of the bristles to improve the appearance by neutralizing any slight yellowness.

- **2.17 Board** A piece of timber used for the filling material of a wire drawn brush.
- **2.18 Bore Through Hole** A thinner diameter hole made in the board to pass the drawing wire on the other side of the board. Also called 'knot hole'.
- **2.19 Brash Wood** Wood which is liable to break suddenly with little or no splintering.
- **2.20 Bridge Handle** Bridge-shaped handle fitted on the bark of the brush.
- **2.21 Bridle** Wire or cord binding used for keeping the filling material in position in certain types of brushes.
- 2.22 Bristle see 2.43.2.1
- 2.23 Bristles, Darjeeling see 2.43.2.1
- **2.24 Bristles, French** see **2.43.2.1**
- **2.25 Bristles, Raw** Bristles not graded to length, colour or quality and not processed for use in making the brush.
- **2.26 Brush** Tools used for cleaning, sweeping, dusting, painting, scrubbing, washing, etc. Brushes are generally made with hairs, bristles, fibres, whalebones, metal wires, nylon monofilaments, cotton fabrics and with many other natural or manmade filling material. Various types of brushes can be grouped into the categories mentioned in **2.26.1** to **2.26.6**.
- 2.26.1 Paint and Varnish Brushes
- **2.26.1.1** Brush, artists A round-shape, fine, quality brush with pointed tip made with sable or squirrel hairs. The overall shape of the brush is like a pen. Also called a 'sable or squirrel pencil'.
- **2.26.1.2** *Brush*, distemper Flat or round type of brush made with bristles, hairs, fibres or their admixtures. Used for distempering of buildings, walls, etc.
- **2.26.1.3** Brush, flat (painter's duster brush)
  - A flat, ferruled brush, with any filling material, but as per general usage, it is a particular kind of brush used by the painters and essentially made of pure, fine and properly straightened bristles of natural colour; and

- b) A flat type of brush used by the painters for dusting down the surfaces before painting.
- **2.26.1.4** Brush, kalsomine Brush for lime or whitewashing. Usually made with mixtures of hairs and fibres and seldom with bristles. Deriving name from kalsomine, an incorrect form of calcimine. Also called a 'whitewash' brush or a 'calcimine' brush.
- **2.26.1.5** *Brush*, *lacquer* A thin, flat or round, small type of brush. It is made with soft hairs used for lacquering or for like jobs.
- **2.26.1.6** Brush, one knot A round, cheaper type of brush for whitewashing or distempering. The desired quantity of the filling materials are strongly bound with string or wire to form a knot which is fitted with a handle. One-, two or three-knot types are available.
- **2.26.1.7** Brush, oval, ferrule bound An oval ferrule painter's brush, essentially made with best selected fine quality of properly straightened bristles which are rigidly set with any suitable cement in the ferrule used in any kind of paint, varnish or their solvents and washing fluids.
- **2.26.1.8** Brush, round, copper wire bound A round socketed brush made essentially with pure, straightened bristles, usually of longer sizes. The bristles are put in the metal socket with a suitable cement.

Copper wires are coiled over the metal socket and hence the name. Suitable for painting wider surfaces.

**2.26.1.9** *Brush*, *sash tool* — As its name indicates, this type of brush is generally used for painting of window sashes, narrow strips or panels. Available in round and oval shape. Made with fine bristles of natural colour encased in ferrules and are rigidly set with any suitable adhesives.

#### 2.26.2 Industrial Brushes

**2.26.2.1** *Brush*, *card* — A long brush with small knots either pan set or wire-drawn and is used for fluffing off cloth pieces. Also used for cleaning of carding engines.

# **2.26.2.2** Brush, casting — see <u>**2.26.2.5**</u>

- **2.26.2.3** Brush, circular A brush having circular brushing surface with a central hole to fit it in a spindle for operations. Various kinds of filling materials are used in making the brush according to the needs. If wires are used as the filling material, then it is called as 'brush, circular, wire'.
- **2.26.2.4** *Brush*, *cup* A cup shape brush made with metal wires which are firmly fixed in the cup shape metal case.

- **2.26.2.5** *Brush, foundry* An oblong type of brush made with flat steel wire which is fixed in a wooden back with or without a canvas webbing strap for gripping. Available in many sizes and shapes to suit the need of foundrymen, road contractors and for the like jobs. Also called 'casting brush'.
- **2.26.2.6** Brush, hand scratch A brush made of steel or brass wire and used for scraping, rust removal, removal of old paints, etc.
- **2.26.2.7** Brush, jewellery Available in circular types as hand brush or circular power brush, made of brass wire, horsehair or bristles set in wooden body, similar to other power brushes but delicate in handling.
- **2.26.2.8** Brush, roller A cylindrical brush used in textile mills. Knots of filling materials set radially in a long wooden roller provided with shafts to operate it with power. The filling materials may be tough bristles, hairs or nylon monofilaments. They are available for combing, flat cleaning, damping, washing, back filling, etc. Also used in paper mills.

#### **2.26.3** Toilet Brushes

- **2.26.3.1** *Brush*, *bath* A bathing brush is usually made of bristles or nylon monofilaments. The knots of the filling materials are set in a plastic or wooden base provided with long handle for applying on the back.
- **2.26.3.2** *Brush*, *hair* There are two types one with handles called 'ladies' and the other without handle called 'military or gent's. Made of stiff bristles or nylon monofilaments and set in wooden, plastic or ivory back.
- **2.26.3.3** Brush, make-up A toilet brush used to soften the tones of the base lotion, powder, etc, after taking the make-up. It is similar to ladies' hair brush and made with soft white bristles or nylon monofilaments which are set in small knots in wooden or plastic back.
- **2.26.3.4** Brush, nail cloning As its name implies, this type of brush is used for cleaning finger nails. Usually made with tough bristles or nylon monofilaments set in wooden or plastic back.
- **2.26.3.5** *Brush, shaving* A toilet brush, the purpose of which is reflected through its name. Generally made with soft bristles, nylon monofilaments and also available with badger hairs.
- **2.26.3.6** *Brush*, *tooth* Used for cleaning teeth, usually made with white bristles or nylon monofilament.

# 2.26.4 Domestic Brushes

**2.26.4.1** *Brush, banister* — This brush is commonly used for sweeping carpets, floors, roads, etc. Usually

made with mixture of horse- or cow-tail hairs and coca fibres. The inferior variety is made of admixtures of palmyra fibres, etc. The tufts of the filling materials are set, with staples in wooden back with handle. Also called 'hand-sweeping brush'.

- **2.26.4.2** *Brush, clothes* A brush made with semistiff bristles or nylon monofilaments which are set in a wooden back without handle. Much care is taken while selecting the filling materials so as not to damage the soft woollen textures of the garments when brushing. The filling materials are set in or wire drawn or machine filled or hand drawn.
- **2.26.4.3** *Brush, commode* A long-handled domeshaped brush made with palmyra or nylon fibres and is used for cleaning commodes.

# 2.26.4.4 Brush, drain — see 2.26.4.10

- **2.26.4.5** Brush, dusting An implement to remove dust or small particles without causing any cut or marks on the swept surfaces. Used by goldsmiths, silversmiths, artists, painters, wood and ivory carvers, etc. Filling material being the very best soft material.
- **2.26.4.6** Brush, feather dusting It is a kind of duster brush which consists of a 60 cm to 70 cm long cane stick and about three-fourth part of which is covered with feathers. Not, generally manufactured by brush manufacturers.
- **2.26.4.7** *Brush, jam duster* A dusting brush made with knots of bristles hair, fibres, or their admixtures, set in wooden base with handle.
- **2.26.4.8** Brush, lavatory Brush for the purpose of cleaning of lavatory pan. Usually there are two types one like the shape of a hockey stick and is made by setting knots of stiff fibres in the curved portion of the handle, and the other is made of same stuff but by twisting-in-galvanized wires. Both the ends of the brush thus formed is fitted in a round wooden handle in the form of a ring or loop.

# 2.26.4.9 Brush, mill — see 2.26.4.1

- **2.26.4.10** Brush, scavenger These brushes are made with cane splits, palmyra fibres, etc, which are set or bound in half-round or flat wooden back and a long wooden or bamboo handle is centrally fitted at the back. Used for cleaning or washing of roads, streets, etc.
- **2.26.4.11** *Brush, shoe blacking* A small type of shoe polishing brush for applying the leather polish.
- **2.26.4.12** Brush, shot polishing Usually made from horse or cow tail hairs filled in a wooden base of generally rectangular shape with flat or oval back. The face of the brush is levelled cut.

**2.26.4.13** Brush, sweebing — A brush made with mixtures of fibres and hairs which are set in knots in half-round wooden backs with rounded ends. A long wooden or bamboo handle is fitted centrally at the back.

#### 2.26.5 Commercial Brushes

- **2.26.5.1** Brush, badger hair A studio work brush made with badger hair or any other soft hairs. It is used to soften the tone of a picture drawn or for quality polishing works.
- **2.26.5.2** *Brush*, *can* A form of diary brush with fibres and nylon monofilaments. The bunches of the fibres arc set or wire drawn in a wooden base with or without handle.
- **2.26.5.3** *Brush*, *dabber* A type of brush for the artists or artisans. Made of soft hairs fixed in quill and the top of the brush is dome shaped. Also known as 'hair mop brush '.
- **2.265.4** *Brush, dandy Brushes* made with tough bristles or fibres and used for grooming horses.
- **2.26.5.5** *Brush*, *glue* A round small brush used in glue-pot.
- **2.26.5.6** *Brush*, *laundry* Shaped like a hair brush, but made with bristles, whisk and used by the laundrymen.
- **2.26.5.7** *Brush, lettering* Another kind of studio work brush. Made with bristles of natural colour and of soft nature.

# 2.26.5.8 Brushes, pencil

- a) Cut Liner Brush used by the sign painters, artisan for drawing lines on cycle frames, bordering porcelain cups, dishes, etc. Made with squirrel or any other soft hairs and which are fixed in quills and in knots; and
- b) Stripper A lining brush made with soft and fine hairs filled in ferrule or in quill. The tips of the hairs instead of reaching all to the top, lie in slant like the sharp edge of a sword. Also called 'sword stripper'.
- **2.26.5.9** Brush, scrubbing Brush used for scrubbing of floors, walls, decks, etc. There may be many shapes. But generally two types are much in use. One type is like the shape of the sole of a shoe with the filling materials cut at different levels while the other is rectangular in shape and the filling materials are levelled at the top. Made with stiff fibres set in knots in wooden back.
- **2.26.5.10** *Brush, softeners* Another type of studio work brush made with fine and white bristle or badger hairs. The shape of the brush is flat and the

filling materials are not in knots. Used by the designers, artists, decorators to soften the tones of the paintings and for applying of costly polishes on the furniture.

#### 2.26.5.11 Brushes, strippling

a) Grainer — Brushes used by the decorators for imitating the natural grains of wood over any other surface. It consists of series of small knots of long and soft hairs or bristles spaced in the wooden block regularly or irregularly:

A single knot grainer is called a pencil grainer.

- b) Strippler A rectangular type of brush made with soft and fine bristles which are set in small knots in wooden back and the tops of the knots are perfectly levelled. Some type of brushes have a bridge type of handle across the back while the others are provided with handle at one side. Used hg the decorators for uniform spreading out of paint.
- c) Fitches (flat and round) A small flat type of brush with short protruding bristles or hairs and with a long handle fitted with the ferrule. So named, because once a particular type of hair, called 'fitch', was used to make such brushes. But now-a-days it is mostly made with fine and silky white bristles (sometimes black) or also with red sable hairs. A costly type of studio work brush.
- **2.26.5.12** Brush, stencil A round shape brush made with bristles, hairs or their mixture and used for stencilling or marking. Also known as 'marking brush'.
- **2.26.5.13** *Brush, typewriter* Two types of brushes are used for cleaning of typewriters. One used for cleaning of remote parts is similar to brush, artists, or brush, stencil. The second are used for cleaning of types is similar to toothbrush.

# 2.26.6 Miscellaneous Brushes

- **2.26.6.1** *Brush, bottle cleaning* These brushes are used for bottle or test tube cleaning; made with bristles or nylon monofilaments. Available in two types one type is used manually and second type used for power operation.
- **2.26.6.2** Brush, carriage washing Brush used for washing down the railway carriages. The filling materials consist of horse tail hair and coca fibres. The bunches of the filling material are either wire drawn or set with iron staples upon a wooden base. A long bamboo or wooden handle is centrally fitted at the back at an angular position.

- **2.26.6.3** Brush, Push sweeping Broom brushes of rectangular shape. Tufts of vegetable fibres are fixed, pan set or filled or tied in the holes of wooden back. A long bamboo or wooden handle centrally fitted from the wooden half-round or flat wooden back. It is used for sweeping, cleaning of floors, pavements, roads, walls or railway platforms, etc.
- **2.26.6.4** Brush, tar A one knot, round, ferruled brush with the handle short or long, fitted with it at an angular position, if the handle is long. Mixture of fibres and hairs are commonly used as the filling materials. It is used for applying tar.

# 2.27 Calabar Basses — see 2.9

- **2.28 Cane** Split rattan used as filling material for brushes or brooms.
- **2.29 Cappings** A type of filling in certain types of brushes. In this there is inner core of a specific filling material and this is capped by an outer layer of different quality of the same or different filling material.
- **2.30 Cement** A setting compound used in the brush industry for holding the filling material firmly.
- 2.31 China Bristle see 2.43.2.1
- 2.32 Coco see 2.43.1.4
- **2.33** Creeping of Cement Is the tendency of flowing of the cement downward when kept at a higher temperature.
- 2.34 Cat, Liner see 2.26.5.8
- 2.35 Dabber see 2.26.5.3
- **2.36 Decay or Rot** Disintegration of wood tissues caused by fungi or other micro-organism.
- **2.37 Deck-Scrub** Ordinary flat tap broom head filled with bassine or bass and made extra-stiff by cutting the material short.
- **2.38 Dipping** Applying of cement at the butt ends of the knots or tufts of the filling materials by dipping these into the adhesive before fixing.
- **2.39 Dragging** A process of sorting of hairs into their lengths.
- **2.40 Drawing** Process of securing tufts by means of drawing wire.
- **2.41 Entering Hole** *see* **2.104**
- **2.42 Ferrule** Is the portion of the brush in which the filling material is securely held. They may be oval, rectangular or of any other shape and made of aluminium, tin, copper, plastic or of any other material.

- **2.43 Filling Material** A general term which denotes anything set, fixed, tied, bound, or filled in ferrule, socket, band, ring, back or base of any type of brush.
- **2.43.1** Filling Materials of Vegetable Origin Many types of fibres of vegetable origin are used as filling material. The most common are given below.
- **2.43.1.1** African piassawa A kind of fibre obtained from leaf-stalk and trunk of an African palm tree. The fibres are yellow in colour, generally dyed before use in making brushes.
- **2.43.1.2** *Aloe* A brush, filling material obtained from aloe tree.
- **2.43.1.3** Bassine or palmyra fibre Obtained from the stalks of the palmyra palm grown in South India and Ceylon. These fibres are strong, coarse, and fairly resilient.
- **2.43.1.4** *Coco* The stiff fibres obtained from the outer husks of the coconut and is available in almost all parts of the tropical areas.
- **2.43.1.5** *French whisk* Fibres obtained from a grass of French origin.
- **2.43.1.6** *Jammave fibre* This is obtained from the leaf of *Agara hetera-cantha* and is finer than Mexican fibre but the cross-sections are very similar.
- **2.43.1.7** *Manila fibre* Fibre obtained from wild plantain and named after the part in the Phillipine Islands from where it is exported.
- **2.43.1.8** *Mexican fibre* This is obtained from the plant *Agara lophantha rar*. poselgaeri which grows wild in some parts of Mexico. This is also known as 'Tampico fibre' or hemp.
- **2.43.1.9** *Palma fibre* This is obtained from a tree yucca which grows in Mexico.
- **2.43.1.10** Palm fibre There are many species of this plant and the brush filling material is obtained from different parts of the plant in each case. In the case of basses, bassines, kitool, gumati, etc, it is obtained from the stalks of the leaves; in the case of palmyra cane from the leaf-ribs and still in some cases from the flowers.
- **2.43.1.11** *Palmyra fibre* Fibres obtained from the leaf stalk of palmyra palm.
- **2.43.1.12** Whisk The fibrous roots of a grain bearing plant, such as rice plant, used in manufacture of certain types of brushes. Also known as 'French whisk'.
- **2.43.2** Filling Materials of Animal Origin Hairs of many animals (pig, boar, horse, cow, squirrel,

- hog, goat, etc) from various parts are used as filling materials for brushes.
- **2.43.2.1** Bristles The natural wiry, stiff and erect hairs obtained from the back and neck of pigs, hogs and wild boars, with the flag-end intact, tapering in section and widest at the root. These bristles are called Chinese, Tibetan, Polish, French, Darjeeling, etc, depending on the country of origin.
- **2.43.2.2** *Hairs, cow* These are fine, with matt to faint lustre and soft feel. Generally used as adulterant with the horse hair.
- **2.43.2.3** *Hairs, coal* These are soft hairs with silky feel. They may be white, grey, black, or of any other colour.
- **2.43.2.4** *Hairs, horse* These are fine, harsh and fairly lustrous. Available in black, grey, brown and white colours.
- **2.43.2.5** *Hairs, sable* Hairs obtained from the tails of three animals namely, black sable, kolinsky and weasel are tilled 'sable hairs'.
- **2.43.2.6** Hairs, squirrel These types of hairs are circular eat the end, changing to dumbell shape in the centre and again reverting to circular shape at the tip. These hairs are generally classified according to their colour and place of origin.
- **2.43.2.7** *Mohair* The fine silky hairs of Angora goat and is used with the skin intact for making roller paint brush.
- **2.43.2.8** *Okata* Long and stiff variety of Russian bristles.
- **2.43.3** Filling Materials of Man-Made Origin Nylon is the most common synthetic filling material used for brush making. Polystyrene and polyvinyl chloride are also used to a limited extent.
- **2.43.3.1** *Nylon* This is a generic term used for synthetic fibres, forming polymeric amides. Many types of nylons are possible but only three types are used as the filling material in brushes:
  - a) Type 6 It is an internal condensation product of hexamethylene diamine (caprolactum);
  - b) Type 66 It is a linear polycondensation product of a 6-carbon atoms (diamine hexamethylene diamine) and a dibasic acid also containing 6 carbon atoms (adipic acid); and
  - c) Type 610 It is a linear polycondensation product of a 6-carbon atoms (diamine) and acid containing 10 carbon atoms (sebasic acid).

- **2.43.3.2** *Wire* Hardened and tempered steel wires either of flat or circular section are used in brushes. The gauge of the wire depends on the nature of the duty for which it is required.
- **2.44** Flag End The natural split-end of the bristles. This is a characteristic of the bristle, and is caused by widening of the central medulla relative to bristle diameter as it approaches the flag end.
- **2.45 Flagging** A process by which the end of a filament is made by splitting it into several finer filaments.
- **2.46 Flirting** A method of removing of loose bristles, hairs, or fibres from a finished brush.
- 2.47 French Whisk see 2.43.1.12
- **2.48 G.B.** An abbreviated term for grey-black bristles of Indian origin.
- **2.49 Glue** A substance obtained by boiling skin, hoof, horns, etc, of animal. Used in brush industry as an adhesive.
- **2.50 Grading** Dressing of bristles into their lengths according to their qualities and colours.
- 2.51 Grainer see 2.26.5.11
- **2.52 Grooving** Narrow channels made on the board or bark of a brush for better grip.
- **2.53 Guillotine** Machine for trimming the uneven ends of the filling materials to make them even and levelled.
- **2.54 Gumati Fibre** Palmyra fibre of Indonesian origin and has much similarities with kitool, a filling material.
- **2.55 Hackle** An implement fitted with steel spikes, set at regular intervals used for combining brush filling material. For filling materials like sable hair, a similar implement made of plastic is used.
- **2.56 Jam Duster** see **2.26.4.7**
- **2.57 Knock Back Teat** A test for a finished brush in which the board is knocked on a hard surface to ascertain whether the tufts have been thoroughly bottomed.
- **2.58 Knot** A bunch of filling material which has been cemented in a ferrule or wound with wire and then set.
- 2.59 Knot Hole see 2.18
- **2.60 Knot Strength** If a knot (or loop) is made in a filament before it is tested, then the result recorded at break is the knot (or loop) strength.

- **2.61 Lapped Seam Ferrule** Tin ferrule which has the metal lapped and soldered at the joint, generally at one end.
- **2.62 Length-Out** Free length of the filling material in a finished brush outside the ferrule, stock, back or socket of the brush.
- **2.63 Lining Tool** There are two types —one is like a small flat varnish brush but with the filling material as soft hairs or fine bristles cut on the slant and the other is made with soft and long hairs fixed in quill in knot. The former is sometimes called a 'slant cut fitch' and is used by the sign-painters, decorators and designers.
- **2.64 Loop Strength** *see* **2.60**
- 2.65 Manilla Fibre see 2.43.1.7
- 2.66 Mexican Fibre see 2.43.1.8
- **2.67 Mildew** This term is used to describe certain bacteria or moulds, the former being usually responsible for the rotting of hairs, bristles, or whalebone and the latter for the rotting of fibres, basses and whisk.
- 2.68 Mohair see 2.43.2.7
- **2.69 Mottler** Another form of grain brush which is used for the same purpose. The difference is that instead of series of small knots, it is a continuous brush.
- 2.70 Nylon Monofilament see 2.43.3.1
- **2.71 O.B.** An abbreviated trade term for Indian bristles with orange or red tinged flag ends.
- 2.72 Okata see 2.43.2.8
- **2.73 Oven Test** A method for ascertaining the holding capacity of setting cement in pan set brushes.
- **2.74 Palmyra Fibre** *see* **2.43.1.11**
- **2.75 Pattern** The distribution and arrangement of the tuft holes.
- **2.76 Penetrating Set** Where the protrusion of the filing material varies from tuft to tuft.
- **2.77 Pin Set** The filling material set in the board or stock of brush with staples.
- **2.78 Pitch** A solid substance obtained by distilling wood or coal tar. An adhesive for brushfilling materials.
- **2.79 Pointing** The process of straightening the bristles by the action of water or steam.

- **2.80 Polishing of Fibres** One of the finishing operations done after processing. It is done to improve appearance and to reduce friction between one fibre and the other.
- **2.81 Pull Test** When a small bunch of filling material is subjected to a straight pull with thumb and finger grip, it shall not come out.
- **2.82 Quill** The butt end of the feathers of certain water birds. The quill is used for making a wide range of in quill brushes as holder of the knots of fine and soft hairs. These brushes are used for medicinal purposes, signwriting pottery, painting, etc.
- 2.83 Rattan Cane or bamboo split
- **2.84 Refilling** The filling material is filled again
- **2.85 Resiliency of Bristles** The property of the bristles to return to its original position after its displacement.
- **2.86 Rifling** Bristles below 45 mm in length
- **2.87 Rubber Setting** The setting of the filling material by means of rubber compound.
- **2.88 Sap Wood** The outer layers of the log, which in growing trees contain living cells. The sap wood is usually lighter in colour.
- 2.89 Sash Tool see 2.26.1.9
- **2.90 Shorts** Bristles more than 45 and less than 57 mm.
- **2.91 Shouldering** The bottom portion of the tuft hole where the tuft rests.
- **2.92 Sisal** A kind of white fibre which comes from American or African countries.
- **2.93 Slogging** The process of manufacturing a brush and securing the tufts by means of staples.
- **2.94 Solid Dressing** A term which means that the bundles of bristles contain all bristles of one length or nearly so.
- **2.95 Staple** A loop of wire for fixing or holding the filling material in the back of the brush.
- **2.96 Stappling** A process of securing tufts of filling material in a brush with the help of machine.

- **2.97 Sterilization** The heat or chemical treatment or both given to the filling material to protect the brush maker and user from the infection with anthrax.
- **2.98 Strippler** *see* **2.26.5.11** (ii)
- 2.99 Stock see 2.17
- **2.100 Straightening** The process of eliminating the curvatures of bristles or hairs (brush filling materials).
- **2.101 Stripper** A lining brush made with soft and fine hairs filled in ferrule or in quill. The tips of the hairs instead of reaching all to the top, lie in slant shape like the sharp edge of a sword. Also called 'sword stripper'.
- **2.102 Taper Dressed** As opposed to solid dressing, it means presence of shorter lengths of bristles in the bundles of the specified length.
- **2.103 Tuft** A bunch of filling material filled in a tuft hole.
- **2.104 Tuft Hole** A bigger diameter hole in the board in which the filling material is inserted and retained in position either by cement setting or by wire.
- **2.105 Union Fibre** A mixture of different types of specified filling material in the prescribed proportion.
- 2.106 Vulcanizing see 2.87
- 2.107 Wedge A non-metallic peg
- **2.108 Whalebone** It is not really bone but a substance growing in the mouth of certain members of the whale family which are specifically known as 'whalebone whales'. It grows in the form of a number of horny plates which is known as 'baleen'. To render it suitable for brush making material, the plate is splitted into its component fibres.
- **2.109 Whisk** The fibrous roots of a quitch grass or the straw of a grain bearing plant used in the manufacture of certain types of brooms and brushes.
- **2.110 Wire Drawn** Method of securing tufts of filling material into the tuft holes by wire drawing. Where two strands of wires are used, the process is known as 'double-drawn'.

#### ANNEX A

#### (Foreword)

#### COMMITTEE COMPOSITION

Brushware, Polishes, Lac and Lac Products Sectional Committee, CHD 23

Organization Representative(s)

ICAR-National Institute of Secondary Agriculture,

Ranchi

DR ABHIJIT KAR (Chairperson)

Asian Paints Limited, Mumbai Shri Subramanya Shreepathi

Climax Burushwares, Delhi Shri Vineet Choudhary

Consumer Voice, New Delhi Shri M. A. U. Khan

CSIR - Central Leather Research Institute, Chennai DR S. N. JAISANKAR

Directorate General of Quality Assurance, New Delhi SHRI A. K. PATRA

SHRIB. S. TOMAR (Alternate)

Government of India Stationery Office, Kolkata Shri Bishambar Dhar

SHRI RAKESH SUKUL (Alternate)

ICAR-National Institute of Secondary Agriculture,

Ranchi

DR MOHAMMAD FAHIM ANSARI

DR ARNAB ROY CHOWDHURY (Alternate)

Indian Transformers Manufacturers Association,

Vaishali

SHRI A. K. KAUL

Integral Coach Factory, Chennai Shri A. Venkatachalam

National Test House (NR), Ghaziabad Shri Buddh Prakash

SHRI M. SURESH BABU (Alternate)

Ordnance Factory, Muradnagar Shrimati Supriya Sinha

Renshel Export Private Limited, Kolkata Shri Suraj Singhania

Shellac and Forest Products Export Promotion

Council, Kolkata

SHRI ASHISH GAJANAN AGRAWAL DR DEBJANI ROY (Alternate)

Shriram Institute for Industrial Research, Delhi Shri Mohan Singh Chauhan

DR MANMOHAN KUMAR (Alternate)

Southern Railway, Chennai Shri Ashok Kumar

Tajna Shellac Private Limited, Kolkata Shri Roshan Lal Sharma

The Waxpol Industries Limited, Kolkata

Shri Shrey Garg

SHRI RABINDRA NATH KANDU (Alternate I)

SHRI C. S. PRASAD (Alternate II)

Tribal Co-Operative Marketing Development

Federation of India Limited, Delhi

SHRI SUDHIR KUMAR GULLAIYA

SHRI SIDDHARTHA SANKAR MAITI (Alternate)

Usha Industries, New Delhi Shri Rahul Kumar

Wecare Brushes India, Sonipat Shri Tarun Mehdiratta

Wild Life Crime Control Bureau, New Delhi Shri B. S. Khati

SHRI ARNAB BASU (Alternate)

BIS Directorate General SHRI AJAY KUMAR LAL, SCIENTIST 'F'/SENIOR

DIRECTOR AND HEAD (CHEMICAL) [REPRESENTING

DIRECTOR GENERAL (Ex-officio)]

Member Secretary Shri Sushant Kumar Scientist 'C'/Deputy Director (Chemical), BIS This Pade has been Intentionally left blank

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