

GLOSSARY OF PAINT TERMS



YOU CAN'T BUY A BETTER PAINT FOR LESS!™

THE FOLLOWING INFORMATION ON PRODUCT AND PAINTING TERMS PERTAINS TO THE SECTION HEADED 'GENERAL DATA' IN THE SPECIFICATION SECTION OF THE BROCHURE.

ACCELERATED WEATHERING

In order to simulate the typical weathering that could be expected of a coating under various conditions, laboratory and field tests are conducted. These simulate expected weather conditions over a long period, but are accelerated so that actual testing takes place over a reduced period of time. Although they provide an indication of product performance, they may not accurately reflect changes to the coating involved.

ACRYLIC RESIN

Acrylic resins are a group of related thermoplastic or thermosetting plastic substances derived from acrylic acid, methacrylic acid or other related compounds used for coatings.

AIR DRYING ALKYD

These are paints which dry when they are exposed to normal air temperatures, and do not need coats additional heat to dry to reach optimal hardness. There are various examples of this which include undercoats, emulsion paints, oil-based primers, and gloss finishes.

ANTI CORROSIVE COATINGS

These paints when applied to prepared, clean metal surfaces are useful in preventing the development of rust on metal generally, but specifically on iron and steel.

BLAST CLEANING

This cleaning method literally involves "blasting" through the use air pressure. Using high air pressure, abrasives, usually silica particles, are directed on to metal and remove rust, scaling and other corrosive products from the face of steel surfaces. In addition to silica (often referred to as sand blasting) iron grit and shot pellets are used. The process is most commonly undertaken in workshops by suppliers of steel. Priming of surfaces that have been blasted should be undertaken as soon after completion of the process as possible.

THE "BODY" OR CONSISTENCY OF PAINT

Much like wine, paint can be referred to as being "full bodied" or even "heavy-bodied". All that is meant is the "thickness" of the paint in the container and when it is being applied.

BRINGING FORWARD

Bringing forward is the process of applying additional paint on surfaces where the coverage may be too thin, or paint has not taken. This ensures that there is a consistent look to the overall paint job when a final coat is applied.

PAINT BRUSH

Even in this high-tech age, paint brushes are still the most used method of applying paint. As with most products there is a choice of high quality materials- which generally guarantee the best results- and the cheaper brushes, which all too often leave bristles adhering to the surface being painted. Still the best is pig bristle. This offers a fine finish encouraged by the bristle that is naturally tapered and, because the rough surface of each bristle holds paint well. Other, cheaper alternatives are horse hair, fibre and nylon- which often does not produce results which can be expected from natural bristle products.

CELLULOSE PAINTS

These are paints and lacquers that are quick drying and are therefore used primarily for spray paint applications.

CEMENT PAINT

Cement paint is a mixture of traditional Portland cement powder that is mixed with water before being used. It is used mainly for exterior surfaces and provides a rough surface.

CHLORINATED RUBBER

Literally rubber that reacted chemically with chlorine, this is a resin that is the primary ingredient in many paints that need to be resistant to chemicals.



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OPACITY

Opacity refers to paints that are thicker than others and are generally used to easily cover blemishes and even hairline cracks in surfaces being painted. Also referred to as the "spreading rate" of paint, this usually indicates in square metres what surface are can be covered by a certain amount of paint.

CURING

Curing, quite simply, is used as a term to describe the chemical process by which epoxies placed on a surface dry.

SURFACE DRYING

This is the time required for paint to be tack-free when it is touched with a finger tip..

A HARD DRIED SURFACE

This is a painted surface that remains unmarked after a thumb is pressed against the surface.

FLAT SURFACE

This is a non-gloss, matt surface.

THE FLOW OF A PAINT FILM

The ability of paint to produce a finish that is free of brush marks or other marks.

DRY AND WET FILM THICKNESS

The dry film thickness indicated in some of our Data Sheets is the minimum thickness that is recommended for proper protection of the surface on which it is applied.

Film thickness measurements are made in microns, with one micron being the equivalent of 0,001mm
The dry film thickness can be calculated from the applied wet film thickness and vice versa.

$$\text{DFT} = \frac{\text{WFT} \times \% \text{ of volume solids}}{100} \quad \text{or} \quad \text{WFT} = \frac{\text{DFT} \times 100}{\% \text{ of volume solids}}$$

EGGSHELL

Usually applicable to enamel paints, eggshell is the sheen that fits in between matt and high gloss on paint specification charts.

EMULSION PAINTS

Emulsion paints are composed of solid or liquid resin particles mixed with water.

EPOXY RESIN

This is a polymer which is used to make paints chemical and abrasion resistant. It is usually made with petroleum by-products.

ETCH PRIMER

This is a thin pigmented primer based on polyvinyl butyral resin which is used as an application that promotes the adhesive qualities of paint to non-ferrous metals.

FILLER

Is material used for filling cracks or dents in surfaces to be painted.

FLAME CLEANING

This involves using an oxy-acetylene burner to burn rust or other imperfections off a metal surface.

THE FLASH POINT OF PAINT

This is the lowest temperature at which material exposed to the air and heat will catch fire.

FULL COAT

Then full coat refers to the thickest coat of paint which that can be applied in an application without sacrificing the appearance of the surface or its drying time.



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FUNGICIDAL

This is paint that carries a chemical fungicide that destroys mould or mildew on surfaces. A fungicidal wash is a mixture based in water that is used prior to coating to kill mould or mildew.

GLOSS

The gloss of a paint refers to the way a painted area reflects light. The most common terms used are full gloss, eggshell, flat or matt.

HAIR CRACKS

These are very fine cracks in plaster, cement or paint surfaces.

HIDING POWER

This refers to how much paint is needed to cover a surface when it is applied. It is measured as the area in a square metre that can be completely covered by a single litre of paint.

HOLDING PRIMER

Is thin primer used to temporarily cover and protect cleaned steel. This is similar to an 'etch primer'.

KNOTTING

Is a coating, most often shellac and methylated spirit, designed to stop knots or resin streaks showing through paints.

LACQUER

Is a surface coating that dries only through solvent evaporation.

LEAD PAINT

Any paint containing lead. Lead free paint contain no lead pigments or compounds.

METAL SPRAYING

This refers to the application of molten zinc or aluminium to grit-blasted steel, where the non-ferrous layer provides protection against corrosion.

MIST COAT

Is a thin coating applied by spray to seal a porous surface.

MORDANT SOLUTION

This is a liquid preparation applied to a surface to assist paint adhesion on surfaces such as galvanised steel.

OLEO RESIN

Is a binder or clear varnish in which vegetable drying oil has been strengthened by adding synthetic or natural resin. It is added to the hot oil during the manufacturing process.

PAINT REMOVER

This is a liquid containing solvents that strip coatings off surfaces. With a dry paint film it softens the paint so it can be scraped off.

PHOSPHATING

Is a process of treating metal in baths. This produces a phosphate coating which increases paint adhesion and slows down corrosion on steel.

PICKLING

With Acid "pickling," hot structural steel is submerged in a hot acid solution to strip off rust and mill scale. The steel is then rinsed and primed with a rust inhibiting primer while warm. Phosphating may be additional treatment between rinsing and priming.



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Pigment

Pigment in the medium provides colour, opacity and protection.

PRIMER

The primer increases the adherence of paint to the surface being coated. It can also stop porous surfaces absorbing paint and can also stop staining on and reduces corrosion on metals.

PVA

This is short for polyvinyl acetate, which is used as a binder in emulsion paint.

PUTTY

Is a compound used mainly for fixing glass into frames.

POLYURETHANE RESIN

This is the result of a reaction between isocyanate and hydroxylic compounds. It makes paints tougher and abrasion resistant.

POT LIFE

The period for which two-pack paint remains usable after being mixed together.

RESIN

Either compounds that exist naturally or manufactured to strengthen vegetable drying oils in air-drying paints.

ROLLER

A cylinder with different coverings for different surfaces that are used for covering large areas quickly.

SANDING

The use of abrasive papers of various grades to level the surface before painting.

SPREADING RATE

This is measured as an area (square metres) that can be covered by one litre of paint to give a consistent finish. The spreading rate depends on the condition of a surface, the way it is applied, the experience of the painter and even the weather.

SHELF LIFE

This is the period between date of manufacture, transportation and storage of paint in which it can still be used reliably. This period is usually about two years.

SOLIDS CONTENT (VOLUME)

This is usually calculated from the paint formation. The calculated solids content by volume is usually less than the determined solids content by mass. **SOLIDS CONTENT BY MASS**

SOLVENT

The volatile constituent of paint, known also as 'thinner', it evaporates partially or wholly during application and drying time of the paint.

SPRAYING

Applying paint under pressure in a mist to a surface. In volume spraying, compressed air at high velocity but low pressure is used to thrust the paint; in high and low pressure spraying, different pressures of compressed air 'move' the paint from the container, a stream of compressed air atomises the paint from the gun.

In airless spray, compressed air, electricity or a petrol engine is used to propel paint. This method of spray application is exceptionally fast and suitable for the application of heavy materials.

Electrostatic spraying is slow and uses atomized, electrostatically charged particles of paint. This is great for cylindrical articles which can be coated on all sides at once.



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STAINING

Refers to the coating of raw wood with a dye or stain.

STIPLING

Refers to removing or evening out paint by dabbing or lightly beating out the surface immediately after application with a special brush to create a special textured finish.

STOPPING

This is the filling of joints, imperfections or holes in a surface.

STOVING

Is drying or hardening a painted surface by heating in an oven.

STRIPPING

Involves removing old paint by:

By burning it off and using a flame to soften the paint, making it easy to remove.

Paint remover made up of solvents that soften paint for scraping. This is usually followed with a wash off.

THE THEORETICAL SPREADING RATE

The theoretical spreading rate m^2/l for given Dry Film Thickness can be calculated from:

$$M^2/l = \frac{\% \text{ volume solids} \times 10}{\text{Dry film thickness}}$$

Taking 75% of this figure will give the Practical Spreading Rate.

% Volume Solids	20	25	30	35	40	45	50
DFT 20	10,0	12,5	15,0	17,5	20,0	22,5	25,0
25	8,0	10,0	12,0	14,0	16,0	18,0	20,0
30	6,7	8,3	10,0	11,7	13,3	15,0	16,7
50	4,0	5,0	6,0	7,0	8,0	9,0	10,0
60	3,3	4,2	5,0	5,8	6,7	7,5	8,3
75	2,6	3,4	4,0	4,6	5,4	6,0	6,6
80	2,5	3,1	3,8	4,4	5,0	5,6	6,2
100	2,0	2,5	3,0	3,5	4,0	4,5	5,0
125	1,6	2,0	2,4	2,8	3,2	3,6	4,0
150	1,5	1,7	2,0	2,3	2,7	3,0	3,3

The above table gives the Theatrical Spreading Rates DFT's and volume solids.

TOLERANCES

These are values assigned for specific gravity and solids content for production batches.

TINTER

Any coloured pigment or paint mixture used to make small adjustments in colour.

VISCOSITY

Usually measured in Krebs Units (KU). Provides values in specifying and controlling the consistency of paint. The higher KU number, the thicker the paint.