

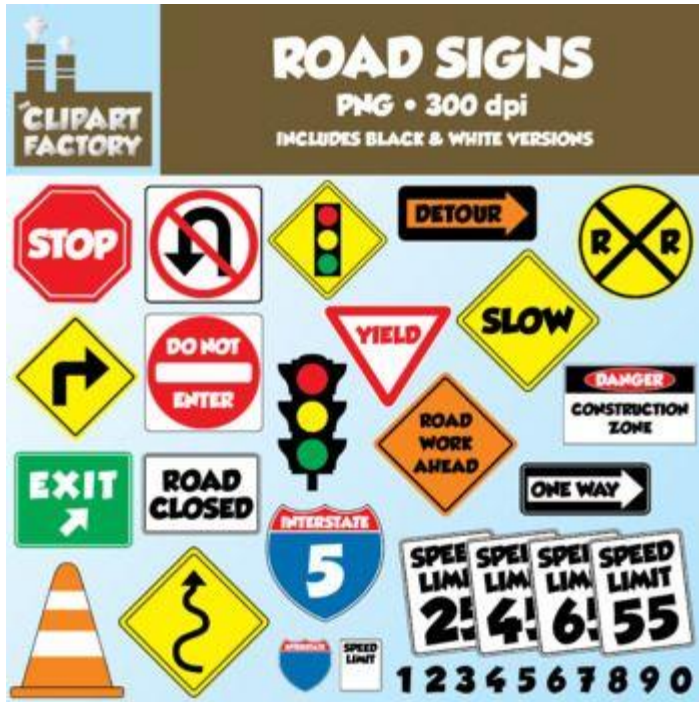
PAINTS

Paint is a fluid that dries to form a continuous solid film when spread over a surface or substrate. Paints are applied to surfaces in thin layers and dried creates a protective and decorative coating. Paints and coatings are not useful products by themselves, but they make other products better, more durable, more attractive, safer, and more saleable. ss



Paints can be used for the following functions:-

(i). Road Markings and Traffic Sign- Paints are used to create road markings, lane dividers, crosswalks and other traffic related signage on roads and highways. Reflective paint improve visibility at night. Thermoplastic road marking paint, also called hot melt marking paint, is a kind of powder paint. When applied as road surface markings, a hot melt kettle is used to heat it to 200 degree celcius to melt the powder, after which it is sprayed on the road surface.



(ii). Marine Coatings- Paints and coatings designed for marine applications protect ships, boats and offshore structures from corrosion. These coatings are essential for

extending the life span of marine vessels.



(iii). Aerospace Coatings- The aerospace industry used specialised paints and coatings for aircraft exterior and interiors. These coatings provide protection against weather, UV radiation, extreme temperatures.



(iv). Protective Coatings for Pipelines and Tanks- In the oil and gas industry, paints and coatings are applied to pipelines, storage tanks, and other infrastructure to

prevent corrosion and from leaks.



(v). Military Applications- The military uses specialised coatings for vehicles, aircrafts, and equipment to provide camouflage, protection and resistant to chemical and



biological agents.

Some common types of paints:-

(i). Water based paints-They use water as a solvent and are popular for exterior and interior wall painting , also known for quick drying time , low odor,etc.

(ii). Oil based paints-They use oil like linseed oil as a binder and turpentine as a solvent , also provide a brightening finish but have a longer drying time and emit strong odors.

(iii). Enamel paints-They are oil or water based paints that dry to a hard , bright finish. Commonly used for furniture and metal surfaces.

(iv). Chalkboard paints-They are special paints that turn surfaces into chalkboards allowing us to write on them with chalk.

(v). Specialty paints-They are paints designed for specific purposes , such as heat-resistant paints for stoves and fireplaces.

(vi). Anti-Corrosive Paint-Made from anti-corrosive elements like linseed oil, zinc chrome and fine sand, Anti-Corrosive Paints are ideal for metallic surfaces. As its name suggests, it helps prevent corrosion on various surfaces, mainly metallic in nature.

Applications, benefits and tips to consider when choosing anti-corrosive paints:

1. Mainly used for pipes, external structures and metallic work
2. It is cost-effective, black in colour and a strong, long-lasting choice

(vii). Cement Paint-Traditionally known as whitewash or cement paint, distemper paint is a paint variant that comprises of lime, chalk, pigment, water and glue. It happens to be one of the oldest types of paint. Contemporary versions of it are in paint form, or else traditional distempers are available in powder form and need to be mixed for application on walls.

Applications, benefits and tips to consider when choosing cement paint:

1. No cracking due to sunlight
2. Can be applied on cement and rough interiors/exterior without primers
3. A cheaper medium of paint and application

(viii). Bituminous Paint-this type of paint is water-proof, it is generally not suited for areas exposed to the sun, since it deteriorates in sunlight. To achieve a certain colour, pigment can always be added to this type of paint.

While paints offer numerous benefits such as protection and decoration. They also have some demerits and drawbacks:

(i). ENVIRONMENTAL IMPACT- Paints like oil-based and solvent-based varieties, contain volatile organic compounds and hazardous chemicals that contribute to air pollution.

(ii). HEALTH HAZARDS- The inhalation or skin contact with paint fumes especially lead-based paints can lead to health problems , like respiratory issues, headache and skin irritation.

(iii). COLOR FADING- Over time,exposure to sunlight and environmental factors can cause paints to fade.This caused loss in aesthetic appeal and therefore,requires repainting to maintain the desired appearance.

(iv). ENVIRONMENTAL WASTE- The improper disposal of old or unused paint can lead to soil and water contamination.

(v). CRACKING- Painted surface are prone to cracking and peeling, particularly if the surface was not well prepared or if low quality paint was used.

PAINT COMPANIES—

- Asian Paints
- Berger Paints
- Indigo Paints
- Dulux Paints
- Nippon Paints