

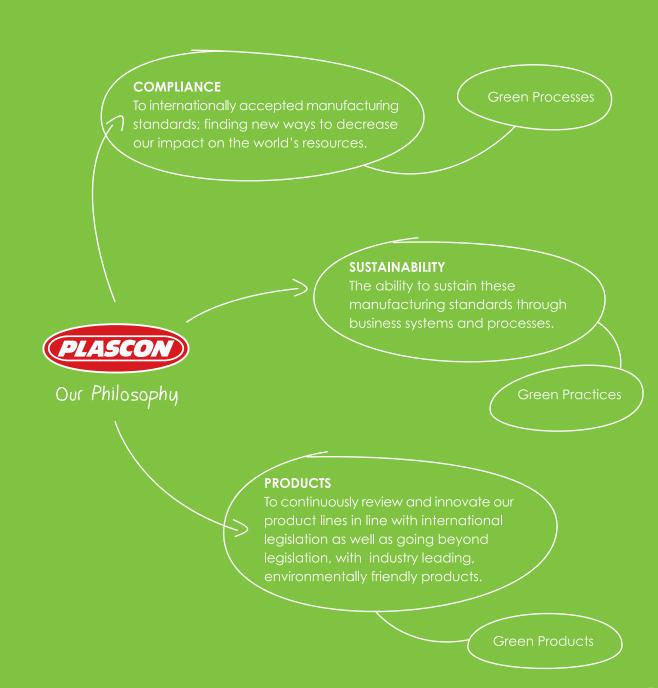


green practices

As the public and government demand more environmental accountability, industrial companies worldwide have been faced with remarkable challenges in creating sustainable solutions through-out their business.

As world-leaders, Freeworld Coatings and Plascon accept and acknowledge our responsibility, not only in creating quality products, but also in encouraging a culture that is dedicated to progressive and sustainable solutions.

Striving to inspire more ecological considerate decisions, we have responded to the challenge by innovating unparalleled sustainable solutions based on 3 fundamental pillars:



two

passionately green... We believe that to create future strategies we need to continually implement new technologies to lead the way in our business. As we work towards progressive products and services, we are consciously reducing our impact on the world around us.

green processes

We have implemented several Environmental Management Systems in all of our South African Manufacturing Plants and in September and October 2005, we attained ISO 14001 certification at all of our plants.

green practices

By implementing and pioneering groundbreaking processes, we ensure that we are starting on the ground level. We focus on providing cutting-edge products while our processes strictly focus on achieving complete sustainable progression.

We have addressed our commitment to meeting the highest international environmental standards through the following processes:

Reduced levels of glycol and solvents

Since 1999, we have reduced the levels of glycols and solvents used. This conscious effort has dramatically reduced ethylene and propylene glycols used as open time modifiers in our water-based paint formulations, as well as reducing the VOC and solvent content.

Lead Free

The harmful effects of lead in paints, have come under close inspection in South Africa. We at Plascon have eliminated the use of lead driers, lead pigments and lead additives as well as Chromium (VI) pigments in our decorative range of products, making them safer.

Titanium Dioxide

Ilmenite Ore is the raw material used in the production of Titanium Dioxide, the white pigment used in paint manufacturing. During the manufacturing process the mineral is converted, through high energy, into Titanium Dioxide. During the last seven years, we have considerably reduced our usage of Titanium Dioxide in specific product ranges. This serves to decrease our use of the mineral as well as energy.



award-winning thinking... freeworld coatings' patented vesiculated bead technology received the department of trade and industry's award for innovation in large companies. this breakthrough technology was inspired by a need to reduce the quantity of white pigment, or titanium dioxide, required in the production of many paints.



In addition to the aforementioned processes, based on our distinct philosophy, we have also committed to ensure the effect we have on our environment is as minimal as worldwide leading technologies will allow.

This has been achieved by initiating a range of improvements in our production

Cleaning Processes

We are currently in the process of implementing water management in our plants and equipment cleaning processes at the end of production. These practices will actively reduce our usage of water.

Waste Management

We have, and will continue to include waste management as a high-level improvement objective, continually cultivating progressive strategies.

Packaging

Waste reduction, suitability for intended purpose and transportation are all considered when choosing packaging, to ensure that what we send out is both environmentally considerate and user-friendly.

Pollution Prevention

In manufacturing our products, all our sites are managed to prevent pollution, with process control and emergency response procedures in place.

All production line changes are part of our ongoing programme to advance the field of sustainability.

for clarification...

volatile organic compounds

VOCs

A VOC is commonly defined as a compound that has a boiling point < 250 degrees Celsius and is of an organic nature. Volatile means that the compound evaporates easily. Organic means that the compound is always made of molecules that contain carbohydrate bonds. Hence water is not a VOC and not all solvents are VOC's.

Volatile Organic Compounds are described by the Green Building Council in the following way: "VOC's are normally given off in the form of gases by new products and materials (e.g. paint, adhesives)."

Sources of VOCs

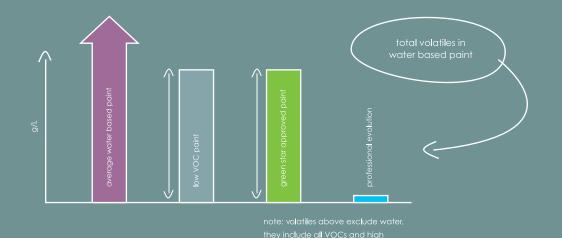
The major man-made source of VOCs is the emissions from motor vehicles. Other sources include the evaporation of gasoline, solvents and hydrocarbon from the petrochemical

industry as well as many household products such as wood preservatives, aerosol sprays, air fresheners, cleaners and disinfectants.

VOC Regulations

Globally, there is no common standard for VOCs in paint. Each major region around the world has designed individual standards and labelling systems in order to control VOCs. As a result there is a significant variation in the meaning and categorisation of what is considered a VOC.

The Green Building Council of South Africa's "Green Star" is the first rating system to be launched in South Africa. The rating has defined VOCs and stipulates specific VOC levels in all interior coating products.



low VOCs vs no VOCs

Products with a high VOC content may release these compounds in high dosages over a period of time, making the potential exposure high.

For the conscious, the solution would appear to be simply in the purchase and use of low VOC products.

Plascon's research has shown that simply lowering a product's VOC content in certain cases, does not provide a viable solution.

Certain low VOC products still contain high boiling point volatile solvents and the risk of solvent exposure to users, in lower dosages albeit over a longer period of time, does exist. We have developed high quality paints using water as the single solvent, allowing for general lowest emissions.

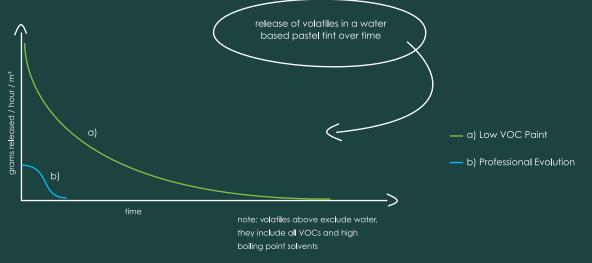
While we classify environmentally friendly paint as Zero VOC and Solvent Free, it also means that we do not use APEO's, CIT's, Formaldehyde, Glycols or lead.

Average Water Based Paint: Contains between 25g/L and 100g/L VOC's

Low VOC: The paint contains less than 25g/L VOCs

Zero VOC: The paint contains less than 5g/L VOCs but may contain high boiling point solvents

Solvent Free: Products are Zero VOC and contain less than 5g/L high boiling point solvents



en eleven



Over the years, we have developed products and innovations that were representative of our commitment to sustainable change.

As a paint company, our products impact and influence all areas of life.

Faced with overwhelming environmental issues, at Plascon we bassionately believe in our role in creating and growing green broducts without compromising product quality and berformance.

innovation

priven by our dealcation to ensuring that our end products provide industry-first solutions, we have introduced quality privironmentally aware products, which do not compromise the finished product or our world.

plascon premium brands

Our interior water based premium brands including Double Velvet, Cashmere and several of our Plascon Professional products, all meet the strict criteria laid out by the Green Building Council of South Africa (Green Star Office rating tool v 1.0).

These products have VOC levels lower than 14g/L (when tinted).

evolved

Breaking new ground in the coatings and painting industry, Plascon proudly introduces the first entirely green paint system, Plascon Professional Evolution.

This new range of products not only meets the needs of a green product, but also goes beyond any further legislative requirements in terms of VOC ratings, offering the Trade Specification market a range of products that are:-

- completely solvent free,
- have zero VOC's (less than 5g/L)VOCs,
- are free of dangerous ingredients such as Methanol, lead and Arsenic.



professional evolution

The world's most innovative raw materials and technologies have been used in the manufacturing of Plascon Professional Evolution

The Plascon Professional Evolution interior range includes:

- Plaster Primer
- Premium Satin
- Premium Matt
- Premium Ceiling
- Premium Water-Based Gloss

Professional Evolution Premium Satin and Matt products are tinted on a made to order basis using unique glycol and solvent free colourant technology.

The range will deliver the same product performance that is expected from our premium Plascon products, however giving all the benefits of a solvent free paint.

This range is manufactured for green specifications, and is exclusively available on a made-to-order basis. For more information, please contact your regional Plascon Trade Office.

Zero VOCs Zero Solvents



fifteen

greener future

Issues of sustainability and environmentally conscious decisions were reserved for a few green conscious individuals and companies a decade ago.

Now as the world becomes more aware of the crisis facing us, made all the more urgent by world leaders, as well as celebrities, everyone is demanding greener solutions. Plascon makes every effort to ensure its decorative products are free of harmful substances. We take every precaution necessary to provide products that are tested to the highest international standards and which comply with the set norms and principles.

Green is more than just a colour to us... it is our business.

glossary

In the production of paints we use a variety of chemicals, which allow us to obtain the desired properties we want for our paints for example resins, pigments, a variety of additives, solvents and water.

VOCs

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Volatile Organic Compounds are described by the Green Building Council in the following way: "VOC's are normally given off in the form of gases by new products and materials (e.g. paint, adhesives)."

APEOs

Alkylphenol ethoxylates (APEO) are nonylphenol compounds. APEO are non-ionic surfactants with an emulsifying and dispersing action, Which makes them suitable for a very large variety of applications. APEO's are normally used in aiding dispersion of colourants in paint.

Formaldehyde

Formaldehyde is a very strong-smelling chemical, in paint it is used as a preservative. Formaldehyde may be associated with asthma and respiratory agitation.

CITs

Chloroisothiazolinone (CIT's) are chemical compounds used as preservatives in a diversified range of products including household cleaners, cosmetics and paint.



paint with imagination

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