

POWERBASE™ VOC



Vapour and Gas Barrier Solutions
Green, Amber 1 & 2 and Red Gas Protection Measures

Product Information

www.powerbasevoc.com

VOC BARRIER MEMBRANE

The next generation innovative engineered barrier membrane

Powerbase VOC is an innovative engineered barrier membrane to prevent the ingress of Volatile Organic Compounds (VOCs) and harmful gases including hydrocarbons, methane, radon and carbon dioxide.

It is specifically designed for developments on brownfield sites or contaminated land. A contaminated land risk assessment will identify the harmful gases and Powerbase VOC is the responsible choice to provide the necessary protection against a broad spectrum of toxic vapours and gases.

VOCs, hydrocarbon vapours and other toxins are found on many brownfield sites, especially land previously occupied by chemical and paint works, timber treatment, petrochemical plants and fuel stores, petrol stations, tanneries, paint factories, paper mills, coalfields, disposal and landfill sites. Some naturally occurring gases are also harmful and these include radon, methane and carbon dioxide.

HDPE and other homogenous membranes, many of which claim to be hydrocarbon resistant, are in fact quite permeable to certain toxic vapours and gases and do not offer adequate protection.

Powerbase VOC is supported by a unique software application, the Powerbase VOC app, a simple-to-use app which provides performance data for a wide range of harmful chemicals. This app is used by design and environmental engineers as part of the risk assessment and is available to download.



Powerbase VOC specified for major development in Southport



Full range of accessories



Easier than HDPE to install

- Powerbase VOC is a multilayered hydrocarbon and chemical resistant barrier membrane. It has exceptional resistance to the commonly found hydrocarbons and chemicals. Using the advanced technology of a composite membrane, the Powerbase VOC membrane comprises protective polymeric layers on both sides of a hydrocarbon and chemical resistant inner core.
- Supplied in a wide-width 3m x 50m roll offering potential labour savings and a competitive price, Powerbase VOC is the superior choice compared to other leading HDPE membranes on the market.
- Powerbase VOC is complemented with a full range of top hats, corner pieces and tapes also available to order.

SUPERIOR PROTECTION

YOUR SOLUTION	DPM	RADON	METHANE	CO2	HYDRO-CARBONS	VOCs
POWERBASE VOC	★ NHBC Green	★ NHBC Amber 1	★ NHBC Amber 2	★ NHBC Amber 2	★ NHBC Red	★ NHBC Red

Powerbase™ is a registered trade name of Industrial Textiles & Plastics Ltd. E&OE.

© Industrial Textiles & Plastics Ltd



Industrial Textiles & Plastics Ltd
Stillington Road
Easingwold
York YO61 3FA
United Kingdom

Tel: +44 (0)1347 825200
Fax: +44 (0)1347 825222
Email: powerbase@itpltd.com
Website: www.powerbasevoc.com



VOC BARRIER MEMBRANE

PRODUCT SUMMARY

DESCRIPTION	Hydrocarbon resistant barrier membrane with exceptional and proven resistance to hydrocarbons, methane, radon and carbon dioxide.
TYPICAL USES	Covered installations with low level mechanical constraints, with no risk of puncture or abrasion. Contaminated land. Brownfield site development. Environmental protection. Water resources and groundwater protection. Secondary containment. Underground structures.
APPLICATION	Installed using conventional thermal (hot air/wedge) welding equipment or proprietary sealing tapes as detailed in the installation instructions.
STORAGE	Rolls should be stored inside, off the ground, protected from sunlight in cool and dry conditions.
COMPOSITION	Composite membrane comprising protective polymeric layers on both sides of a chemical resistant hydrocarbon barrier inner core.

PERFORMANCE COMPARISON – POWERBASE VOC vs HDPE

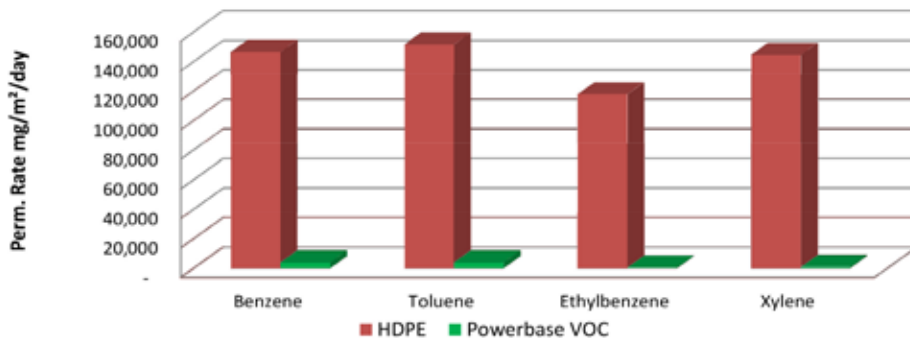
Compliant with the latest legislation, Powerbase VOC is tested to ISO 15105-2, the test endorsed by CIRIA and NHBC :

- BS 8485 warns of the use of HDPE/ LDPE single layer type membranes with poor resistance to hydrocarbons for contaminated land projects.
- BS8485:2015 – The Code of Practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings
- Ciria C748:2014 – Guidance on the use of plastic membranes as VOC vapour barriers

Powerbase VOC is the reliable solution for:

- Ciria C716:2012 – Remediating and mitigating risks from volatile organic compound (VOC) vapours from land affected by contamination
- Ciria C735 – Good practice on the testing and verification of protection systems for buildings against hazardous ground gases
- Statutory guidance for Part 2A of the Environmental Protection Act 1990 – Guidance for the regulation of contaminated land
- NHBC Chapter 4.1 – Land quality – managing ground conditions

ISO 15105-2B test data



Powerbase VOC consistently outperforms HDPE

The exceptional characteristics of Powerbase VOC and its flexible nature make it easier to install in comparison to HDPE

OTHER PRODUCTS

The Powerbase range of vapour and gas membranes includes:

- Powerbase Multigas 300 Barrier Membrane
- Low Perm Methane Gas Membrane
- Radon Gas Membrane

FURTHER INFORMATION

Further information is available on our website www.powerbasevoc.com.

Technical documentation is also available by contacting us by email or telephone.

E: powerbase@itpltd.com
T: +44 (0)1347 825200

POWERBASE™ VOC APP



The Powerbase VOC app is a unique software application that supports the Powerbase VOC membrane.

- Provides site-specific permeation information for contaminants
- Easy-to-use for design and environmental engineers as part of the risk assessment
- Performance data for a wide range of harmful chemicals
- Use the QR code above to register and access the app on a smartphone or tablet.

ACCESSORIES

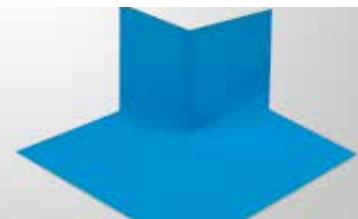
Proprietary accessories, adhesives and sealants must be used to validate any warranties. Further details and information are available on request.



Prefabricated Top Hats



Prefabricated Internal Corner



Prefabricated Corner