

DATA SHEETS

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1. TECHNICAL DATA

1.1 DESCRIPTION

IMPERViTe® HW10 is a blend of isomeric octyltriethoxsilane and siloxane hydrophobic materials which penetrate into the pores of plastered surfaces or natural stone façades preventing the ingress of water or moisture. The resulting reaction between the silicates in the building material create a waterproof, yet vapour permeable silicone resin network within the building product. The carrier of this system is water which enables use of the product in “green” applications.

The advantage of using this system is that no degradation of the façade occurs over time, the natural appearance of the original building material is preserved and no soiling due to pollutants, algae, dust or dirt can occur.

1.2 PROPERTIES/FEATURES

IMPERViTe® HW10 contains a blend of silanes and siloxanes which are susceptible to hydrolysis. Hydrolysis occurs after application to the substrate, at which point the emulsion is converted into a silicone resin water repellent with a strong beading effect. Contact with atmospheric moisture stimulates this effect. There is little or no impairment of the building material’s ability to breathe.

1.3 PENETRATION DEPTH

Penetration depth is dependent on the porosity, density and moisture level of the building material. If required, core drilled samples can be tested afterwards. Penetration can be established by applying water coloured with an ink dye to the side of the core. The depth is measured to the point where staining starts or is evident. Experience indicates penetration to be between 5 and 10mm.

1.4 APPLICATION

The surface onto which the **IMPERViTe® HW10** is to be applied must be clean, sound and free of dust and oil. **IMPERViTe® HW10** must be applied with a brush, roller or by spraying.

The first coat must be followed by the second while it is still wet (wet on wet application) to allow proper penetration.

1.5 USAGE

The usage is greatly affected by the density of the substrate. Due to their lesser density, brickwork and mortar uses slightly more. A test area should be done to determine the usage rate per square metre. On concrete this normally at approximately 500 to 600g/m².

2. MATERIAL SAFETY DATA

2.1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

Name of substance/preparation:

Commercial product name: **IMPERViTe[®] HW10**

2.1.1 USE OF SUBSTANCE / PREPARATION

Industrial/Commercial/Residential.

Used for: Hydrophobic impregnation of plastered and concrete walls, natural stone finishes as a protective agent.

All other areas of application to be agreed with the Application Engineering/Technical Marketing Department of the manufacturer.

2.1.2 COMPANY NAME

Manufacturer/distributor:.....iTe Products (Pty) Ltd

Street:.....7 Clarke Street South

State/postal code/city:.....Alrode, 1451

Telephone:.....+27 11 864 4918

Telefax:.....+27 11 864 2123

Information about the Safety Data Sheet:.....+27 11 864 4918

eMail:.....info@iteproducts.co.za

2.2 HAZARDS IDENTIFICATION

HAZCHEM CODE: 2Z-NON HAZARDOUS

2.2.1 CLASSIFICATION

This product is not classified as a hazardous substance or mixture within the meaning of Directive 67/548/EEC, 1999/45/EC,

R-Phrase Description – Nil

This product is not classified as dangerous according to EC Directive 88/379EEC and subsequent adaptations (CHIP 2 Regulations in the UK).

2.2.2 LABELLING

Labelling (67/548/45/EC):

R-Phrase Description – Nil

S-Phrase Description—Nil

2.2.3 FURTHER HAZARDS TO HUMAN AND ENVIRONMENT:

The product hydrolyses, producing ethanol (CAS no. 64-17-5). Ethanol is highly flammable.

2.3 COMPOSITION/INFORMATION ON INGREDIENTS

2.3.1 CHEMICAL CHARACTERIZATION:

Alkoxy silanes plus siloxane plus water

2.4 FIRST-AID MEASURES

In case of accident or if you feel unwell, seek medical advice.



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IMPREGNATION SYSTEM**

2.4.1 INHALATION OF VAPOUR

Provide fresh air.

2.4.2 AFTER CONTACT WITH THE SKIN

Wash with plenty of water and soap. In case of continuous irritation seek medical advice.

Remove soiled clothing

2.4.3 AFTER CONTACT WITH THE EYES

Rinse immediately with plenty of water. Seek medical advice in case of continuous irritation..

2.4.4 AFTER SWALLOWING

Give small amounts of water to drink. Do not induce vomiting.

2.5 FIRE-FIGHTING MEASURES

2.5.1 SUITABLE EXTINGUISHING MEDIA:

Water mist, extinguishing powder, alcohol resistant foam, carbon dioxide, sand

2.5.2 EXTINGUISHING MEDIA NOT TO BE USED:

Water spray, water jet

2.5.3 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Hazardous decomposition products: alcohols, nitrous gases. Prevent from entering sewerage, water and soil

2.5.4 ADVICE FOR FIRE FIGHTING:

Use respiratory protection independent of re-circulated air.

2.6 ACCIDENTAL RELEASE MEASURES

2.6.1 PERSONAL PRECAUTIONS

Wear personal protective equipment. Be aware of slippage. Keep unprotected people away. Avoid contact with eyes and skin. Avoid inhaling mists or vapours.

2.6.2 ENVIRONMENTAL PRECAUTIONS

Do not allow to enter into sewer, drainage or potable water systems

2.6.3 METHODS FOR CLEANING UP

Large spillages should be contained and pumped into a receiving vessel.

Small spillages should be absorbed on an inert absorbent (sand, sawdust, diatomite)

Use a detergent/soap solution or bio-degradable cleaner.

Dispose of residues in accordance with state regulations.

2.6.4 FURTHER INFORMATION:

Eliminate all sources of ignition

Observe notes under section 7 with regards to safe handling

Observe section 8 for information on personal protective equipment.

For disposal methods refer to section 13.



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2.7 HANDLING AND STORAGE

2.7.1 HANDLING

Avoid formation of aerosols and ensure good ventilation. No special precautions needed with normal housekeeping. Spilled substance increases the risk of slipping

2.7.2 STORAGE

Conditions for storage rooms and vessels:

Do not allow product to freeze. Do not exceed 40°.

2.8 EXPOSURE CONTROLS AND PERSONAL PROTECTION EQUIPMENT

2.8.1 EXPOSURE LIMITS

Maximum airborne concentrations at the workplace:

CAS no. 64-17-5—Aerosol—repairable fraction 10.0mg/m³.

2.8.2 EXPOSURE CONTROLS

Do not inhale gases/vapours/aerosols. Do not eat, drink or smoke when handling.

Personal protection equipment

Respiratory protection

For routine application, not required. In case of aerosol or mist formation, use respiratory equipment—combi filter A/P2.

PPE

For fNitrile rubber gloves, or gloves made of butyl rubber.

Eye protection

Tight fitting protective goggles.

2.8.3 EXPOSURE TO THE ENVIRONMENT LIMITED AND CONTROLLED

Prevent material from entering surface waters and soil

2.9 PHYSICAL AND CHEMICAL PROPERTIES

2.9.1 GENERAL INFORMATION

Physical state / form.....: liquid

Odour: slight

pH..... : Approx 8.0

Boiling Point..... : Approx 100°C

Melting: -1°C

Flashpoint.....: 70°C

Flammability: 395°C

Auto-flammability.....: Not Applicable

Explosion Hazard.....: "

Oxidising Properties: "

Vapour Pressure: Approx 23 hPa at 20°C



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Relative density.....: 0.95gm/cm³

Solubility in water.....: completely soluble

Viscosity (dynamic): Approx 12mPa.s at 25°C

Other information:

Hydrolytic decomposition occurs. Explosion limits for released ethanol: 3.5—15%(V)

2.10 STABILITY AND REACTIVITY

2.10.1 GENERAL INFORMATION:

The product is stable if stored and handled in accordance with standard industrial practices.

2.11 TOXICOLOGICAL INFORMATION

2.11.1 GENERAL INFORMATION:

The product is stable if stored and handled in accordance with standard industrial practices.

Long term experience of this product type indicates no danger to health when properly handled under industrial conditions, and acute toxicity effects are not expected after a single oral exposure.

2.11.2 ACUTE TOXICITY—NO DATA IS AVAILABLE FOR THIS PRODUCT AVOID INHALATIVE EXPOSURE

Acute toxicity estimate (ATE)

ATEmix (oral):>2000mg/kg

2.12 ECOLOGICAL INFORMATION

2.12.1 GENERAL INFORMATION:

The product is not classified as dangerous to the environment according to EC directive 93/21/EEC.

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

According to current knowledge adverse effects on water purification plants are not expected.

2.13 DISPOSAL CONSIDERATIONS

2.13.1 1 MATERIAL

The product and waste water containing product should not be discharged directly into drains and waterways without treatment. The polymer content may be separated in a suitable coagulation and purification plant. Details available on request.

Disposal of the product, solid waste and packaging should be in accordance with local, state or national legislation and undertaken by an authorized contractor.

2.14 TRANSPORT INFORMATION

2.14.1 HANDLING

The product is not classified as hazardous according to International Transport Regulations.

2.15 REGULATORY INFORMATION

The product is not classified as Dangerous according to EC Directive 88/379/EEC (including subsequent amendments) and requires no special labelling.



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2.16 OTHER INFORMATION

2.16.1 MATERIAL

This Material Safety Data Sheet conforms to EC Directive 91/155 EEC and 93/112EC. The above information describes exclusively the safety requirements of the product(s) and is based on our present-day knowledge. It does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. Properties of the product are to be found in the respective product leaflet.

2.16.2 FURTHER INFORMATION:

Commas appearing in numerical data denote a decimal point. Vertical lines in the left-hand margin indicate changes compared with the previous version. This version supersedes all previous versions.

End of Safety Data Sheet -

3. THEORETICAL (VOC) CONTENT

3.1 PRODUCT:

IMPERViTe® HW10 Hydrophobic Impregnating Raw Wall Surface Finish

3.2 ABBREVIATIONS

S.G. = Specific Gravity

g/ml = grams/millilitre

g/l = grams/litre

3.3 FORMULAS

Sum of VOC's in Sealer/Primer formulation = VOC %

$VOC (g/l) = VOC \% \times S.G. \times 10$

3.4 S.G. (g/ml) = 1.00g/ml

3.5 VOC % = 0%

3.6 $VOC (g/l) = 0 \times 1.00 \times 10 = 0g/l$

Maximum VOC content (Specified by Green Building Council of South Africa): 50g/l

Peter Funke

Product Development Manager

4. SHORT REPORT VOC

7 August 2014

Short Report: Product IMPERViTe HW10 Hydrophobic Impregnating Raw Wall Surface Finish

iTe Products **IMPERViTe® HW10** Hydrophobic Impregnating Raw Wall Surface Finish meets the Green Building Council of South Africa's credit criteria for the following reasons:

Maximum VOC allowable (gms/litre)	50g/l
IMPERViTe® HW10	0g/l

This is based on the fact that the product contains no organic solvents.

I declare the above information to be correct

Signed:



Shaun Van Heerden

5. VOC CONFIRMATION NOTICE

7 August 2014

To: All interested Parties

Dear Sir/Madam,

Re: GBCSA requirements for VOC levels in flooring adhesives, sealers and primers

We hereby confirm : **IMPERViTe® HW10** Hydrophobic Impregnating Raw Wall Surface Finish as manufactured by **iTe Products** (Pty) Ltd comply with the GBCSA requirements in respect of permissible VOC levels in flooring adhesives, sealers and primers.

The attached Short Report, VOC Datasheet and this signed letter provides the necessary supporting documentation required as per page 107 of the GBCSA Technical Manual.

The Contractor applying the product must provide written confirmation that : **IMPERViTe® HW10** Hydrophobic Impregnating Raw Wall Surface Finish is used in accordance with our application instructions

Should there be any questions or queries, please contact the writer at 082 772 9137 or via e-mail at sales@iteproducts.co.za

Yours faithfully,



Shaun Van Heerden



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