APPLICATION DATA SHEET

ENVIROGRAF®

AP042-HW01-11-2018

Product Number: 42

HW01

FEATURES:
The HW01 System offers a white and coloured fireproof coating; for upgrading new and already coated timber and wood related surfaces.

- HW01 is a water based product for internal and external use.
- When using HW01 stir the tin well for approximately 5 minutes. In cold weather conditions it can go slightly thick, stand the container in hot water and stir it well – it will then go to a paint consistency.

WARNING
The properties of this product cannot be guaranteed unless storage and application instructions are adhered to, Envirograf® strongly advise that you apply the product over a small area to ensure that there is no adverse reaction to the substrate to be processed.

PREPARATION & APPLICATION
The application to the door is as follows; in most cases it is the room side only of the door that needs treating. For both sides of the door it is a door that separates a corridor or is at the top of a staircase.

Note: It is important to ensure the moisture content of the wood substrate is below 12% / 14% before application and the wood should be kept in a thoroughly dry area.

1. For applications over pre-painted areas – ensure the surface is thoroughly clean and free of grease or dust and that the surface has received a light sanding.
2. Apply one coat of Envirograf® HWAP/WB clear Adhesion Primer at 10-12m² per litre, wait until the primer is thoroughly dry.
3. **For Class 0 & Class 1 BS476 Parts 6&7 and EN B/S1/d0**: apply 1 coat of HW01 at 10m² per litre (100 micron wet film thickness & 60 micron dry film thickness)
   For 30/60 minutes Fire Protection BS476: Part 22, 1987, EN/13501 & SBI S.b1.d0: according to the type/thickness/density of timber apply two coats at 8m² per litre per coat. Each coat dries in 45 minutes. (125 micron wet film thickness & 75 micron dry film thickness per coat)
4. **Ensure that each coat is completely dry before applying the next subsequent coat.**
   Please note the product can be applied by brush, roller or spray processes. Up to 10% water may be added to adjust viscosity for spraying. The contents must be thoroughly mixed before use. Use a 2.5mm to 3mm nozzle
5. **HW01 MUST BE OVER COATED WITH A PROTECTIVE COAT.**
   Please refer to price list for available protective coatings

TOOLS & STORAGE:
Leave brush in cold soapy water then clean with brush cleaner. Envirograf® recommends that the products are stored in temperatures between 5ºC and 30ºC. When transporting or storing the tins ensure that the product is not exposed to freezing conditions. Do not apply the product in temperatures less than 5ºC. Do not allow containers to stand on the floor.
Always check that the Product is within its shelf life. If in doubt contact your supplier.

HEALTH & SAFETY MEASURES
Skin contact: Remove contaminated clothing and wash contaminated skin with soap and water.
Eye contact: Wash with water for several minutes. If irritation persists seek medical advice.
Inhalation: Remove the casualty to fresh air.
Ingestion: Rinse out mouth with water and if conscious drink plenty of water. Seek medical attention.

SAFETY DATA SHEET

ENVIROGRAF®

HS042-HW01-08-2018

Product Number: 42

HW01

Description:

The HW System (Product 42) offers a white coating designed to upgrade new and existing timber substrates, offering up to 30 or 60 minutes fire protection meeting both UK National and European Fire Regulations.

This product comprises of the following materials and therefore is supported by Health & Safety Data Sheets:

- (*Appendix 17)* HW01

*The information contained in this safety data sheet is given in good faith. It is accurate to the best of our knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the user's own assessment of workplace risk as required by other health and safety legislation.

HEALTH & SAFETY INFORMATION SHEET
APPENDIX 17
HW01

20th March 2018

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME:	**AS ABOVE**
MANUFACTURER/SUPPLIER:	Envirograf
ADDRESS:	Envirograf House, Barfrestone, Dover, Kent, CT15 7JG
TELEPHONE/FAX/EMAIL:	01304 842555 01304 842666 sales@envirograf.com
EMERGENCY PHONE NUMBER:	01304 842555 (Monday to Friday 8.30 – 5.30)
PRODUCT USE:	Coatings: Waterborne paint

2. HAZARDS IDENTIFICATION

Health effects:

Hazard Symbol

May product an allergic reaction

Skin	May cause slight irritation on prolonged / repeated contact.
Eyes	May cause some irritation.
Inhalation	No hazard under normal conditions of use.
Ingestion	Low toxicity.
Physical/chemical effects	Not applicable.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical characterization Aqueous (emulsion) polymer system.

Hazardous components:-
Biocidal ingredients-contains:
- 2-methyl isothiazol-3(2H)-one. < 0.0006%. CAS No. 2682-20-4 H301 / H330 / H314 / H318 / H317 / H400
- Pyrithione Zinc < 0.0006% Cas No. 13463-41-7 H301 / H330 / H318 / H400 / H 410
- 1,2-benzisothiazo-3(2H)-one <0.0006% Cas No. 2634-33-5 H330 / H318 / H315 / H317
- 5-chloro-2-methy-3(2H)-lisothiazolone / 2 – methyl3(2H)-isothiazolone (3:1) < 0.0000026% H311 / H330 / H314 / H317 / H400 / H410 / H318

Labeling with: EUH208 Contains - 5-chloro-2-methy-3(2H)-lisothiazolone / 2 – methyl3(2H)-isothiazolone (3:1) - May cause allergic reaction.

4. FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

Skin contact: Remove contaminated clothing and wash contaminated skin with soap and water.
Eye contact: Wash with water for several minutes. If irritation persists seek medical advice.
Inhalation: Remove the casualty to fresh air.
Ingestion: Rinse out mouth with water and if conscious drink plenty of water. Seek medical attention.

If inhaled: Remove person to fresh air. If signs/symptoms continue, get medical attention.

In case of skin contact: Wash off immediately with soap and plenty of water. Remove contaminated clothing. If irritation develops, get medical attention.
Wash contaminated clothing before reuse.

In case of eye contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.

If swallowed: If accidentally swallowed obtain immediate medical attention.
Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms: Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Repeated or prolonged exposure may cause irritation of eyes and skin.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: No information available, treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media: Foam, carbon dioxide, powder, and water spray.
Extinguishing media which must not be used for safety reasons: None known.
Special exposure hazards: None known.
Special protective equipment for fire-fighters: Chemical protection suit / gloves / boots and self-contained breathing apparatus.

5.1 Extinguishing Media
Suitable extinguishing media: Foam, carbon dioxide, powder, and water spray.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media: High volume water jet.

5.2 Special hazards arising from the substance or mixture
Specific hazards during firefighting: The pressure in sealed containers can increase under the influence of heat.

5.3 Advice for firefighters
Special protective equipment for firefighters: Use personal protective equipment. Chemical protection suit/ gloves/ boots and self-contained breathing apparatus.

Further information:
Prevent fire extinguishing water from contaminating surface water or the ground water system.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6. ACCIDENTAL RELEASE MEASURES

5.3 Advice for firefighters
Special protective equipment for firefighters: Use personal protective equipment. Chemical protection suit/ gloves/ boots and self-contained breathing apparatus.

Further information:
Prevent fire extinguishing water from contaminating surface water or the ground water system.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

6.3 Methods and material for containment and cleaning up
Methods for cleaning up: Prevent further leakage or spillage if safe to do so. Large spills should be collected mechanically (remove by pumping) for disposal. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labelled containers. Clean contaminated floors and objects thoroughly while observing environmental regulations. Dispose of in accordance with local regulations.

6.4 Reference to other sections
For disposal considerations see section 13. For personal protection see section 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Advice on safe handling: Wear personal protective equipment.
For personal protection see section 8.
Avoid inhalation, ingestion and contact with skin and eyes.
Do not use in areas without adequate ventilation.
Smoking, eating and drinking should be prohibited in the application area.
Hygiene measures: Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke.

7.2 Conditions for safe storage
Requirements for storage areas and containers: Store in original container.
Keep in properly labelled containers.
Store between 5 and 30 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Do not freeze.

7.3 Specific end use(s)
Specific use(s):
Consult the technical guidelines for the use of this.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
Components with workplace control parameters, below limit for consideration.

8.2 Exposure controls
Personal protection equipment:
Eye protection: Safety glasses with side-shields conforming to EN166

Hand protection
Material: Nitrile rubber
Break through time: 480 min
Glove thickness: 0.1 - 0.4 mm

Remarks: Protective gloves complying with EN 374. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Skin and body protection: not required under normal use. Skin should be washed after contact. Remove and wash contaminated clothing before re-use.

Respiratory protection: not required under normal use. Protective measures: Ensure that eye flushing systems and safety showers are located close to the working place.

Engineering measures:
Use adequate ventilation and/or engineering controls in high temperature processing to prevent
Exposure to vapours. Ensure adequate ventilation, especially in confined areas. Environmental exposure controls
General advice:
The product should not be allowed to enter drains, water courses or the soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour	White	**Explosive properties**	Not applicable.
Form	White paint	**Oxidizing properties**	Not applicable.
Odour	Low odour .	**Vapour pressure**	Not applicable.
pH as supplied	7.2 – 8.2	**Bulk density**	1.28 to 1.31 g/cm³
Boiling point/range	Not determined.	**Solubility:**	
Melting point/range	Not applicable.	**Water solubility**	Miscible.
Flash point	Not applicable.	**Partition coefficient**	Not applicable.
Flammability (solid, gas)	Not applicable.	**(n-octanol/water)**	
Auto ignition temperature	Not applicable.	**Other data**	

Solubility (ies)
Water solubility: insoluble, completely miscible, in all proportions
Partition coefficient: noctanol/water: not determined
Auto-ignition temperature: Not applicable

Viscosity
Viscosity: 10 – 15 Ps
Explosive properties: Not applicable
Oxidizing properties: Not applicable

9.2 Other information
No further information.

10. STABILITY AND REACTIVITY

10.1 Reactivity
No dangerous reaction known under conditions of normal use.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions: None known.

10.4 Conditions to avoid
Conditions to avoid: Extremes of temperature and direct sunlight. In particular frost and freezing conditions.

10.5 Incompatible materials
Materials to avoid: None known.

10.6 Hazardous decomposition products
No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Further information
Remarks: No data is available on the product itself.
Information given is based on data on the components and the toxicology of similar products.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No data available

12.2 Persistence and degradability
Product:
Biodegradability: Remarks: Taking into consideration the properties of several components, the product is estimated not to be readily biodegradable according to OECD classification.

Physico-chemical removability: 98 %
Method: OECD Test Guideline 302
Remarks: The product can be eliminated from water by abiotic processes, e.g. adsorption on activated sludge.

12.3 Bioaccumulative potential
Product:
Bioaccumulation: Remarks: Bioaccumulation is unlikely.

12.4 Mobility in soil
Remarks: No data available

12.5 Results of PBT and vPvB assessment
This mixture contains no substance considered to be persistent, bioaccumulating and toxic (PBT).

This mixture contains no substance considered to be very persistent and very bioaccumulating (vPvB).

12.6 Other adverse effects
Product:
Additional ecological information: This product has no known ecotoxicological effects.

13. DISPOSAL CONSIDERATIONS

Product: In accordance with local and national regulations. The product should not be allowed to enter drains, watercourses or the soil. Waste water from subsequent processing should be given appropriate treatment in line with local regulations.

14. TRANSPORT INFORMATION

14.1 UN number
Not dangerous goods

14.2 UN proper shipping name
Not dangerous goods

14.3 Transport hazard class(es)
Not dangerous goods

14.4 Packing group
Not dangerous goods

14.5 Environmental hazards
Not dangerous goods

14.6 Special precautions for user
Remarks: Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Remarks: Not applicable

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
:This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

REACH - List of substances subject to authorisation (Annex XIV)
:Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances :Not applicable

15.2 Chemical safety assessment

Not applicable

16. OTHER INFORMATION

Section 16: Other information

Full text of H-statements
H301 Toxic if swallowed
H302 Harmful if swallowed
H314 Causes severe skin burns and eye damage
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H330 Fatal if inhaled
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects
H411 Toxic to aquatic life with long lasting effects

Trace amounts of biocide in the product carry these H-phrases in their raw forms.

TECHNICAL DATA SHEET

ENVIROGRAF®

TD042-HW01-11-2018

Product Number: 42

HW01

Description:
White or coloured intumescent coating for all types of timber and timber related products.
For Class 0 & Class 1 BS476 Parts 6 & 7 & EN BS/S1/d0: apply one coat of HW01 at 10m^2 (100 micron wet film thickness & 60 micron dry film thickness)
For 30/60 minutes fire protection BS476: Part 22, 1987, EN/13501 & SBI S.b1.d0: (according to type/thickness/density of timber) apply two coats at 8m^2 per litre per coat. Each coat dries in about 45 minutes. (125 micron wet film thickness & 75 micron dry film thickness per coat).

Physical Data:

Type:	Water based fire protection product.
Colour:	White
Gloss:	N/A
Viscosity:	8-16 poise
Specific Gravity:	1.30

Recommendations for Use:

Recommended spreading rate:	See above
Application methods:	Brush, roller or spray
Dry to touch:	1-2 hours. Varies with temperature, humidity, ventilation and film thickness.
Conditions during application:	Temperature of air and substrate must be above 5 ^{0}C.

Miscellaneous:

Size of containers:	Available in 1, 2½, 5 and 20 litres
Remarks:	Frost-free freight and storage. STIR WELL before use
Shelf Life:	12 months in unopened original packaging (Stored between 5-30 ^{0}C)

Directions For Use:
Ensure that the surface is dry, clean and free from dust before application.
If coating over existing paint or varnish apply Envirograf Product 42 (HWAP) adhesion primer.

Stir thoroughly before and during use. Apply by brush roller or spray, two coats are required to satisfy the requirements of BS476 Parts 6 & 7, Class 0 & Class 1(1987) spread of flame, and Classification B/S1/d0 of European Standard EN13501 Parts EN13823 (2002) single burn test (SBI) and EN 11925-2 (2002) ignitability.
The coverage of the first coat may vary according to the type and density of timber.
Apply the first coat and allow 1-2 hours to dry. Please ensure that the first coat is dry before applying the next coat.
Apply the second coat and allow 1-2 hours to dry.
Apply Envirograf top coat – see price list for available top coats.