

# TECHNICAL DATA SHEET



**ENVIROGRAF®**

TD042-HW01-07-2023

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<sup>2</sup>.

**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<sup>2</sup> per litre per coat. Each coat dries in about 45 minutes.

**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 °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 °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.

# APPLICATION DATA SHEET



## ENVIROGRAF®

AP042-HW01-07-2023

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 10-12m<sup>2</sup> 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 10m<sup>2</sup> per litre.  
**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 8m<sup>2</sup> per litre per coat. Each coat dries in 45 minutes.
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 5°C and 30°C. 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 5°C. 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.



### 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*

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**SECTION 1: IDENTIFICATION OF THE PREPARATION AND COMPANY**

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**1.1 Product identifier**

Trade name : HW01  
Other names : Product 42

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use of the Substance/Mixture: Coating for consumer applications, professional applications and Industrial use

**1.3 Details of the supplier of the safety data sheet**

Company: Envirograf  
Address: Envirograf House, Barfrestone, Dover, Kent, CT15 7JG  
Telephone: 01304 842555 sales@envirograf.com  
Fax: 01304 842666  
Email: sales@envirograf.com

**1.4 Emergency telephone number:**

Emergency telephone number: 01304 842555 (Monday to Friday 8:30 – 17:30)

This safety datasheet complies with the requirements of Regulation (EC) No. 830/2015, (EC) No 1272/2008 and UK REACH

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**SECTION 2: HAZARDS IDENTIFICATION**

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**2.1 Classification of the substance or mixture**

**Classification According to Regulation (EC) No. 1272/2008 (CLP):**

**2.2 Label Elements**

**Hazard pictogram :**



**Signal word** : Warning  
**Hazard statements** : 1,3,5-Triazine-2,4,6-Triamine. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

**Labelling (REGULATION (EC) No 1272/2008)**

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008.

**Additional Labelling**

EUH208 Contains 5-chloro-2-methyl-4-isothiazolin-3-one and 2-methyl-2H-isothiazol-3-one (3:1), 1,2-Benzisothiazol-3(2H)-one. May produce allergic reaction.  
The treated article incorporates biocidal products.

**2.3 Other hazards**

This mixture contains no substances considered to be persistent, bioaccumulating and toxic (PBT).

**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS****3.1 Mixtures**

Components of substances with concentration limits of Annex II to Regulation (EC) No. 1907/2006

Chemical characterization: Aqueous (emulsion) polymer system

Contains Biocidal ingredients:

Substance name	CAS number	Weight % content (or range)	H-Codes
2-methyl isothiazol-3(2H)-one	2682-20-4	<0.0006%	H301/H330/H314/H318/H317/H400
Pyrithione Zinc	13463-41-7	<0.0006%	H301/H330/H318/H400/H410
1,2-benzisothiazol-3(2H)-one	2634-33-5	<0.0006%	H330/H318/H315/H317
5-chloro-2-methyl-3(2H)-isothiazolone / 2-methyl3(2H)-isothiazolone (3:1)		<0.0000026%	H311/H330/H314/H317/H400/H410/H318
1,3,5-triazine-2,4,6-triamine	290-87-9	<9.7%	H351/H373

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

1,3,5-Triazine-2,4,6-Triamine. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

**SECTION 4: FIRST AID MEASURES****4.1 Description of first aid**

- General advice:** Get medical attention if symptoms occur.  
Show this safety data sheet to the doctor in attendance.
- 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.
- 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.

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## SECTION 5: FIRE-FIGHTING MEASURES

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### 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 of the ground water system.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulation.

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### 6.1 Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Use personal protective equipment.

### 6.2 Environmental precautions

**Environmental precautions:** Do not dispose of into surface water or sanitary sewer systems. The product should not be allowed to enter drains, water courses or the soil.

### 6.3 Methods and material for containment and cleaning up

**Methods of 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.

**SECTION 7: HANDLING AND STORAGE**

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**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   Store in original container.  
 areas and containers:       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.  
   No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

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

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**SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION**

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The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s)

**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:             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. Ensure adequate ventilation.  
 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.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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### 9.1 Information on basic physical and chemical properties

Appearance	Liquid, aqueous dispersion
Colour	White
Odour	Ester-like
Odour threshold	Not determined
pH	7.2 – 8.5
Melting point/freezing	0°C
Boiling point	100°C
Flash point	Not applicable
Evaporation rate	Not determined
Flammability (solid, gas)	The product is not flammable.
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapour pressure:	Not determined
Relative vapour density:	Not determined
Relative density:	1.2 – 1.3 g/cm <sup>3</sup>

### Solubility(ies)

Water solubility:	Insoluble, completely miscible, in all proportions
Partition coefficient:	Noctanol/water: not determined
Auto-ignition temperature:	Not applicable
Viscosity:	10 – 15 Ps
Explosive properties:	Not applicable
Oxidizing properties:	Not applicable

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## SECTION 10: STABILITY AND REACTIVITY

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**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 reaction: None known.

**10.4 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.

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## SECTION 11: TOXICOLOGICAL INFORMATION

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### 11.1 Information on toxicological effects

**Remarks: No data is available on the product itself.**

Information given is based on data on the components.

Remarks: Contains no substances with workplace exposure limits(WELs, EH40/2005), refer to section 8.1 "control parameters".



Remarks: toxicology data related to single components not the final product itself.

<b>13463-41-7 Pyrithione zinc</b>		
Sensitisation	OECD 429 (LLNA)	(mouse) Not sensitising – S 2971
<b>2682-20-4 2-methylisothiazol-3(2H)-one</b>		
Sensitisation	OECD 406 (MKA)	(Guinea pig) Sensitising – S 131
<b>2634-33-5 1,2-benzisothiazol-3(2H)-one</b>		
Sensitisation	OECD 406 (MKA)	(Guinea pig) Sensitising – S 2220
	OECD 429 (LLNA)	(mouse) Sensitising – S 523

## SECTION 12: ECOLOGICAL INFORMATION

**Remarks: No data is available on the product itself.**

Information given is based on the data on the components.

### 12.1 Toxicity:

Aquatic toxicity:	
13463-41-7 Pyrithione zinc	
EC <sub>50</sub> / 72 h	0.051 mg/l (Pseudokirchneriella subcapitata) (OECD 201) S 3023
EC <sub>50</sub> / 48 h	0.051 mg/l (Daphnia) (OECD 202) S 3024
LC <sub>50</sub> / 96 h	0.0104 mg/l (Brachydanio rerio) (OECD 203) S 3026
NOEC / 28 d	0.00125 mg/l (Brachydanio rerio) (OECD 215) S 3027
NOEC / 72 h	0.0149 mg/l (Pseudokirchneriella subcapitata) (OECD 201) S 3023
NOEC / 96 h	0.00046 mg/l (Skeletonema costatum) (OECD 201) literature
2682-20-4 2-methylisothiazol-3(2H)-one	
EC <sub>50</sub> / 72 h	0.157 mg/l (Pseudokirchneriella subcapitata) (OECD 201) S 128
EC <sub>50</sub> / 48 h	1.68 mg/l (Daphnia) (OECD 202) S 126
LC <sub>50</sub> / 96 h	6 mg/l (rainbow trout) (OECD 203) S 27
NOEC / 21 d	0.55 mg/l (Daphnia) (OECD 211) S 792
NOEC / 28 d	2.38 mg/l (fathead minnow) (OECD 210) S 794
NOEC / 72 h	0.03 mg/l (Pseudokirchneriella subcapitata) (OECD 201) S 128
2634-33-5 1,2-benzisothiazol-3(2H)-one	
EC <sub>10</sub> / 72 h	0.04 mg/l (Selenastrum capricornutum) (OECD 201) S 2238
EC <sub>50</sub> / 72 h	0.11 mg/l (Selenastrum capricornutum) (OECD 201) S 2238
EC <sub>50</sub> / 48 h	3.27 mg/l (Daphnia) (OECD 202) S 2240
LC <sub>50</sub> / 96 h	1.6 mg/l (rainbow trout) (OECD 203) S 2746