

SAFETY DATA SHEET



ENVIROGRAF®

HS083-EP/FS/IN/WB-01-2024

Product Number: 83
EP/FS/IN/WB Water Based
Intumescent Coating for Steel Protection

Description:

Smooth-finish intumescent paint system for the protection of Steel and Aluminium. Can be applied over existing paint after removal of any loose particles and washing down.

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

- (Appendix 17) EP/FS/IN/WB Steel Paint

*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
STEEL PAINT

22nd January 2024

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

PRODUCT NAME: HW01
MANUFACTURER/SUPPLIER: Envirograf
ADDRESS: Envirograf House, Barrestone, 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)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)
Acute toxicity, Category 4 H302: Harmful if swallowed
Serious eye damage/eye irritation, Category 2A H319: Causes serious eye irritation

2.2 Label Elements

Hazard pictogram:



Signal word

Warning Warning

VOC content : This product contains 20g/l VOC.

Hazard statements:

H301	: Toxic if swallowed
H302	: Harmful if swallowed
H311	: Toxic in contact with skin
H314	: Causes severe skin burns and eye damage
H315	: Causes skin irritation
H317	: May cause an allergic reaction
H318	: Causes serious eye damage
H319	: Causes serious eye irritation
H330	: Fatal if inhaled
H331	: Toxic if inhaled
H332	: Harmful if inhaled
H341	: Suspected of causing genetic defects
H361F	: Suspected of damaging fertility
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

Precautionary statement:

P264	: Wash hands thoroughly after handling.
P270	: Do not eat, drink or smoke when using this product.
P261	: Avoid breathing dust/fume/gas/mist/vapours/spray.

Response:

P301+P312+P300	: If swallowed: Call a poison centre/doctor if you feel unwell. Rinse mouth.
P302+P352	: IF ON SKIN: Wash with plenty of water
P333+P313	: If skin irritation or rash occurs: Get medical advice/attention.

2.3 Other hazards

No other information.

3. COMPOSITION / INFORMATION ON INGREDIENTS**Chemical characterization:** Aqueous dispersion of a polymer with non-hazardous fire retardant and intumescent additives.

Substance name	CAS No.	EINECS Number	%	Classification
1,3,5-TRIAZINE-2,4,6-TRIAMINE	CAS 108-78-1		7 TO 9 %	H361F
PYROTHIONE ZINC	CAS 13463-41-7		< 0.0017 %	H301, H318, H331, H400, H410
1,2-benzisothiazol-3(2H)-one	CAS 2634-33-5		< 0.014 %	H302, H315, H317, H318, H400, H411
2-methylisothiazol-3(2H)-one	CAS 2682-20-4		< 0.0017 %	H301, H311, H314, H317, H330, H400, H410
3(2H)-isothiazolone, 5 Chloro-2-Methyl mixture with 2-Methyl-3(2H) isothiazolone	CAS 55965-84-9		< 0.00035 %	H314, H317, H410
2-amino-2-methylpropanol	CAS 124-68-5		< 0.12%	H315, H319, H412
1-propanol, 2-methyl-2-(methylamino)	CAS 27646-80-6		< 0.0096 %	H302, H315, H318, H412

4. FIRST AID MEASURES**4.1 Description of first aid measures**

General advice	: Get general 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.
In case of eye contact	: Rinse with plenty of water.
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.
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5. FIRE-FIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing media	: Not combustible. : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
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Unsuitable extinguishing media : No information available.

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.

Further information : The product itself does not burn.
: 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

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : 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 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 personal protection see section 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling : Wear personal protection 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, including any incompatibilities

Requirements for storage areas and containers : Store in original container.
: Keep in properly labelled containers.
: Store in closed containers between + 5°C and + 30°C in dry conditions.
: Avoid extremes of temperature.
: Protect from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters, below limit for consideration.

8.2 Exposure controls

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.
Personal protection equipment:	
Eyes protection	: Safety glasses with side-shields conforming to EN166
Hand protection	: Material – nitrile rubber. : Break through time – 480min. : Glove thickness – 0.1 – 0.4mm
Remarks	: Protective gloves complying with EN374. 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 the eye flushing systems and safety showers are located close to the working place.
Environmental exposure controls	: General advice: This product should not be allowed to enter drains, water courses or the soil.

9. PHYSICAL AND CHEMICAL PROPERTIES

Colour	: White
Form	: Liquid
Odour	: Low odour
pH as supplied	: 7.2 - 8.5
Boiling point/range	: ~ 100°C
Freezing point/range	: ~ 0°C
Flash point	: Not applicable.
Flammability (solid, gas)	: Not applicable.
Autoignition temperature	: Not applicable.
Explosive properties	: Not applicable.
Vapour pressure	: Not applicable.
Bulk density	: 1.29 to 1.32 g/cm ³
Viscosity range	: 30 - 60 Ps
Kinematic viscosity	: Not established.
Solubility	: -
Water solubility	: Miscible.
Partition coefficient (n-octanol/water)	: Not determined.
Other data	: -

10. STABILITY AND REACTIVITY

10.1 Stability	: Stable under normal conditions.
10.2 Materials and Conditions to avoid	: No hazardous reactions when stored and handled to prescribed instructions.
10.3 Hazardous decomposition products:	: No decomposition if stored and applied as directed. Thermal decomposition may generate oxides of carbon and phosphorus.

11. TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008.

Acute toxicity

Components:

1,3,5-Triazine-2,4,6-triamine

Acute oral toxicity : LD50 Oral (Rat): 3161 mg/kg
: Method: No information available.

Acute inhalation toxicity : LC50 (Rat): 2.44mg/l
: Exposure time: 4 h
: Method: OECD Test Guideline 403

Acute dermal toxicity : Remarks: No data available

Pyrrhione zinc

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

1,2-benzisothiazol-3(2H)-one

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : Remarks: No data available

2-methylisothiazol-3(2H)-one

Acute oral toxicity : Remarks: No data available

Acute inhalation toxicity : Remarks: No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Acute oral toxicity : LD50 Oral (Rat): 64 mg/kg
: Method: No information available.

Acute inhalation toxicity : LC50 (Rat): 0.33 mg/l
: Exposure time: 4 h
: Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 (Rabbit): 87.12 mg/kg
: Method: No information available.

2-amino-2-methylpropanol

Acute oral toxicity : LD50 Oral (Rat): 2900 mg/kg
: Method: OECD Test Guideline 401

Acute inhalation toxicity : Remarks: No data available

Acute dermal toxicity : LD50 (Rabbit): > 2000 mg/kg
: Method: OECD Test Guideline 402

1-propanol, 2-methyl-2-(methylamino)

Acute oral toxicity : LD50 Oral (Rat): 500 mg/kg
: Method: No information available.

Acute inhalation toxicity : Remarks: No data available.

Acute dermal toxicity : Remarks: No data available.

Skin corrosion/irritation

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : Not irritant (rabbit)
: Method: OECD No.404

Pyrithione zinc

Remarks : No data available

1,2-benzisothiazol-3(2H)-one

Remarks : No data available

2-methylisothiazol-3(2H)-one

Remarks : No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Species : Rabbit
Method : OECD Test Guidelines 404
Remarks : Corrosive to skin

2-amino-2-methylpropanol

Remarks : Causes skin irritation.

1-propanol, 2-methyl-2-(methylamino)

Remarks : Causes skin irritation.

Serious eye damage/eye irritation

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : Mildly irritating.

Pyrithione zinc

Remarks : No data available

1,2-benzisothiazol-3(2H)-one

Remarks : No data available

2-methylisothiazol-3(2H)-one

Remarks : No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Species : Rabbit
Method : No information available.
Remarks : Corrosive to eyes.

2-amino-2-methylpropanol

Remarks : Causes serious eye irritation.

1-propanol, 2-methyl-2-(methylamino)

Remarks : Causes serious eye irritation.

Respiratory or skin sensitisation

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : No respiratory or skin sensitization

Pyrithione zinc

Remarks : No data available

1,2-benzisothiazol-3(2H)-one

Remarks : No data available.

2-methylisothiazol-3(2H)-one

Remarks : No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Species : Mouse

Remarks : Causes sensitisation.

2-amino-2-methylpropanol

Remarks : No data available

1-propanol, 2-methyl-2-(methylamino)

Remarks : No data available

Germ cell mutagenicity

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : No germ cell mutagenicity.

Pyrithione zinc

Genotoxicity in vitro : Remarks: No data available

1,2-benzisothiazol-3(2H)-one

Genotoxicity in vitro : Remarks: No data available

2-methylisothiazol-3(2H)-one

Genotoxicity in vitro : Remarks: No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Genotoxicity in vitro : Remarks: In vitro tests did not show mutagenic effects.

2-amino-2-methylpropanol

Genotoxicity in vitro : Remarks: No data available

1-propanol, 2-methyl-2-(methylamino)

Genotoxicity in vitro : Remarks: No data available

Carcinogenicity

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : No data available

Pyrithione zinc

Remarks : No data available

1,2-benzisothiazol-3(2H)-one

Remarks : No data available

2-methylisothiazol-3(2H)-one

Remarks : No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Remarks : No data available

2-amino-2-methylpropanol

Remarks : No data available

1-propanol, 2-methyl-2-(methylamino)

Remarks : No data available

STOT – single exposure

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : No data available

Pyrithione zinc

Remarks : No data available

1,2-benzisothiazol-3(2H)-one

Remarks : No data available

2-methylisothiazol-3(2H)-one

Remarks : No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Remarks : No data available

2-amino-2-methylpropanol

Remarks : No data available

1-propanol, 2-methyl-2-(methylamino)

Remarks : No data available

STOT – repeated exposure

Components:

1,3,5-Triazine-2,4,6-triamine

Remarks : No data available

Pyrithione zinc

Remarks : No data available

1,2-benzisothiazol-3(2H)-one

Remarks : No data available

2-methylisothiazol-3(2H)-one

Remarks : No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Remarks : No data available

2-amino-2-methylpropanol

Remarks : No data available

1-propanol, 2-methyl-2-(methylamino)

Remarks : No data available

11.2 Information on other hazards

Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

1,3,5-Triazine-2,4,6-triamine

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Pyrithione zinc

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

1,2-benzisothiazol-3(2H)-one

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

2-methylisothiazol-3(2H)-one

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

2-amino-2-methylpropanol

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

1-propanol, 2-methyl-2-(methylamino)

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Further information

Product:

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

Components:

1,3,5-Triazine-2,4,6-triamine

Toxicity to fish : LC50: >3000 mg/l
: Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates : LC50: >1000 mg/l
: Exposure time: 48 h

Toxicity to algae/aquatic plants : EC50: 940 mg/l
: Method: Growth inhibition test.

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

M-Factor (Chronic aquatic toxicity) : 1

Pyrethione zinc

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

M-Factor (Chronic aquatic toxicity) : 1

1,2-benzisothiazol-3(2H)-one

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

M-Factor (Chronic aquatic toxicity) : 1

2-methylisothiazol-3(2H)-one

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 0.19 mg/l
: Exposure time: 96 h

Toxicity to daphnia and other Aquatic invertebrates : EC50 (Daphnia magna (water flea)): 0.16 mg/l
: Exposure time: 48 h

Toxicity to algae/aquatic plants : ErC50 (Selenastrum capricornutum): 0.037 mg/l
: Exposure time: 72 h

M-Factor (Acute aquatic toxicity) : 100

Toxicity to fish (Chronic toxicity) : NOEC: 0.046 mg/l
: Exposure time: 35 d
: Method: OECD Test Guideline 210

Toxicity to daphnia and other aquatic invertebrates (chronic toxicity) : NOEC: 0.1 mg/l
: Exposure time: 21 h
: Species: Daphnia magna (Water flea)

M-Factor (Chronic aquatic toxicity) : 100

2-amino-2-methylpropanol

Toxicity to fish : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: No data available

Toxicity to algae/aquatic plants : Remarks: No data available

M-Factor (Acute aquatic toxicity) : 1

Toxicity to fish (Chronic toxicity) : Remarks: No data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: No data available

M-Factor (Chronic aquatic toxicity) : 100

1-propanol, 2-methyl-2-(methylamino)

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill)): 190 mg/l
: Exposure: 96 h
: Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna): 193 mg/l
: Exposure: 48 h

	: Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	: EC50 (Scenedesmus subspicatus): 565.5 mg/l : Exposure: 72 h : Method: OECD Test Guideline 201
M-Factor (Acute aquatic toxicity)	: 1
Toxicity to fish (Chronic toxicity)	: Remarks: No data available
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	: Remarks: No data available
M-Factor (Chronic aquatic toxicity)	: 100

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: This product can be eliminated from water by abiotic processes, e.g., adsorption on activated sludge.

Components:

1,3,5-Triazine-2,4,6-triamine

Biodegradability : Remarks: No data available

Pyrrithione zinc

Biodegradability : Method: OECD Test Guideline 308
: Remarks: 0.5 d (half-life)

1,2-benzisothiazol-3(2H)-one

Biodegradability : Remarks: No data available

2-methylisothiazol-3(2H)-one

Biodegradability : Method: OECD Test Guideline 308
: Remarks: 1.28 -2.1 d (half-life)

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Biodegradability : Method: OECD Test Guideline 301
: Remarks: Inherently biodegradable

2-amino-2-methylpropanol

Biodegradability : Remarks: No data available

1-propanol, 2-methyl-2-(methylamino)

Biodegradability : Method: OECD Test Guideline 301F
: Remarks: 89.3 % (28 days)

12.3 Bioaccumulative potential

Product:

Bioaccumulation : Remarks: Bioaccumulation is unlikely.

Components:

1,3,5-Triazine-2,4,6-triamine

Bioaccumulation : Remarks: No data available

Pyrithione zinc

Bioaccumulation : Method: OECD Test Guideline 107
: Remarks: 1.21 (n-octanol/water)

1,2-benzisothiazol-3(2H)-one

Bioaccumulation : Remarks: No data available

2-methylisothiazol-3(2H)-one

Bioaccumulation : Method: OECD Test Guideline 117
: Remarks: < 0.32 (n-octanol/water)

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Bioaccumulation : Method: OECD Test Guideline 305
: Remarks: Does not bioaccumulate.

2-amino-2-methylpropanol

Bioaccumulation : Remarks: No data available

1-propanol, 2-methyl-2-(methylamino)

Bioaccumulation : Remarks: No data available

12.4 Mobility in soil

Product:

Distribution among environmental compartments : Remarks: No data available

Components:

1,3,5-Triazine-2,4,6-triamine

Distribution among environmental compartments : Remarks: No data available

Pyrithione zinc

Distribution among environmental compartments : Remarks: No data available

1,2-benzisothiazol-3(2H)-one

Distribution among environmental compartments : Medium: Soil
: Remarks: No data available

2-methylisothiazol-3(2H)-one

Distribution among environmental compartments : Remarks: No data available

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Distribution among environmental Compartments : Remarks: No data available

2-amino-2-methylpropanol

Distribution among environmental compartments : Remarks: No data available

1-propanol, 2-methyl-2-(methylamino)

Distribution among environmental compartments : Remarks: No data available

12.5 Results of PBT and vPvB assessment

Product:

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).

Components:

1,3,5-Triazine-2,4,6-triamine

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).

Pyrithione zinc

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).

1,2-benzisothiazol-3(2H)-one

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).

2-methylisothiazol-3(2H)-one

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).

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

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).

2-amino-2-methylpropanol

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).

1-propanol, 2-methyl-2-(methylamino)

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 Endocrine disrupting properties

Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Components:

1,3,5-Triazine-2,4,6-triamine

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Pyrrithione zinc

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

1,2-benzisothiazol-3(2H)-one

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

2-methylisothiazol-3(2H)-one

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

3(2H)-isothiazolone,5-chloro-2-methyl mixture with 2-Methyl-3(2H) isothiazolone

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

2-amino-2-methylpropanol

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

1-propanol, 2-methyl-2-(methylamino)

Assessment

: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

Additional ecological information

: This product has no known ecotoxicological effects.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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.

Contaminated packaging

: In accordance with local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN number or ID 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 ADR/RID, AND, IMDG-Code, ICAO/IATA-DGR.
14.7 Maritime transport in bulk according to IMO instruments	
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

Indication of changes	:
Abbreviations and acronyms	:
EC	European Commission
GLP	Good Laboratory Practice
LC50	The amount of a substance suspended in the air required to kills 50% of a test animal during a predetermined observation period
LLNA	Local lymph node assay
NOEC	No observed effect concentration
OECD	Organisation for Economic Co-operation and Development
PBT	Persistent, Bioaccumulative and. Toxic chemicals
vPvB	very Persistent and very Bio-accumulative
WELs	Workplace exposure limits
WGK	German Water Endangerment Class
SDS	Safety Data Sheet
STOT	Specific target organ toxicity
Key literature references and sources for data	: Regulation (EC) No. 1272/2008.

	Regulation (EC) No. 1907/2006 Regulation (EC) No 1005/2009 Regulation (EC) No 850/2004 Workplace exposure limit EH40/2005 Regulation (EU) 2016/425 REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).
Tests referenced	OECD 117 - Partition Coefficient (n-octanol/water), HPLC Method OECD 201 - Freshwater Alga and Cyanobacteria, Growth Inhibition Test OECD 202 - Daphnia sp. Acute Immobilisation Test OECD 203 - Fish, Acute Toxicity Test OECD 210 - Fish, Early-life Stage Toxicity Test OECD 211 - Daphnia magna Reproduction Test OECD 215 - Fish, Juvenile Growth Test OECD 305 - Bioconcentration: Flow-through Fish Test OECD 307 - Aerobic and Anaerobic Transformation in Soil OECD 308 - Aerobic and Anaerobic Transformation in Aquatic Sediment Systems OECD 309 - Aerobic Mineralisation in Surface Water – Simulation Biodegradation Test OECD 406 - Skin Sensitisation OECD 429 - Skin Sensitisation LLNA
Relevant H-Statements (number and full text)	H301 - Toxic if swallowed H302 - Harmful if swallowed H311 - Toxic in contact with skin H314 - Causes severe skin burns and eye damage H315 - Causes skin irritation H317 - May cause an allergic reaction H318 - Causes serious eye damage H319 - Causes serious eye irritation H330 - Fatal if inhaled H331 - Toxic if inhaled H332 - Harmful if inhaled H341 - Suspected of causing genetic defects H361F - Suspected of damaging fertility 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 H412 - Harmful to aquatic life with long lasting effects

Recommended use : Decorative coating with fire retardant properties.
Further information : Consult technical data sheet.

The information contained in the Health and Safety Data Sheet is provided in accordance with the requirements of the most recent REACH Regulations. The product should not be used for purposes other than those shown without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. This information contained in the safety data sheet is based on present knowledge and current EU legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.