

SAFETY DATA SHEET



ENVIROGRAF®

HS083-MORDANT SOLUTION-01-2020

Product Number: 83 Mordant Solution

Description

Solution for use on galvanised steel before application of protection coatings.

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

- (Appendix 88) Mordant solution

*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 88
MORDANT SOLUTION

1. IDENTIFICATION OF THE PREPARATION AND COMPANY

1.1 Product identifier

Product name : Mordant Solution
Product code : Not available
Other means of identification : Not available

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

Product use : Consumer applications, Professional applications
Use of the substance/ mixture : Pretreatment mixture

1.3 Details of the supplier of the safety data sheet

Envirograf
Envirograf House, Barfrestone, Dover, Kent, CT15 7JG
Telephone/fax/email: 01304 842555 01304 842666 sales@envirograf.com

1.4 Emergency telephone number:

Supplier
01304 842555 (Not 24 Hours)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Product definition : Mixture
Classification According to Regulation (EC) No. 1272/2008 [CLP/GHS]:
Flam. Liq. 3, H226
Eye Irrit. 2 H319
STOT SE 3, H336 (Narcotic effects)
Aquatic Chronic 3, H412

Classification according to Directive 1999/45/EC [DPD]: This product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R10
Xi; R36
R67
R52/53

Physical/chemical hazards : Flammable

Human Health Hazards : Irritating to eyes. Vapours may cause drowsiness and dizziness

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

See Section 16 for the full text of the R phrases or H statements declared above

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label Elements

Hazard pictograms :



Signal word : Warning

Hazard statements : Flammable liquid and vapour
Causes serious eye irritation
May cause drowsiness or dizziness
Harmful to aquatic life with long lasting effects

Precautionary statements

General	: Keep out of reach of children. If medical advice is needed, have product container or label at hand
Prevention	: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames & other ignition sources . No Smoking
Response	: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes.
Storage	: Store in a well-ventilated place. Keep cool
Disposal	: Dispose of contents & container in accordance with all local, regional, national & international regulations
Hazardous ingredients	: propan-2-ol 1-methoxy-2-propanol
Supplemental label elements	: Not Applicable

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable

Tactile warning of danger : Not applicable

2.3 Other hazards

Other hazards which do not result in classification : None known

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures :Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
1-methoxy-2-propanol	REACH # 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	>= 15- <20	R10 R67	Flam. Liq 3, H226 STOT SE 3, H336 (narcotic effects)	[1] [2]
propan-2-ol	REACH# 01-2119457558-25 EC: 200-661-7 CAS:67-63-0 Index: 603-117-00-0	>=15 – <20	F: R11 Xi; R36 R67	Flam. Liq. 2, H225 Eye Irrit. 2 H319 STOT SE 3, H336 (narcotic effects)	[1] [2]
phosphoric acid	REACH # 01-2119485924-24 EC: 231-633-2 CAS: 7664-38-2 Index: 015-011-00-6	<10	C; R34	Skin Corr. 1B, H314 Eye Dam. 1, H318	[1] [2]
copper(II) carbonate- copper (II) hydroxide (1:1)	EC: 235-113-6 CAS: 12069-69-1	>=1 – <2.5	Xn; R22 N; R50/53	Acute Tox. 4, H302 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]

*for full text of R-phrases and H statements declared above see section 16

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8

SUB codes represent substances without registered CAS Numbers.

4. FIRST AID MEASURES

4.1 Description of first aid

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

Inhalation: Remove to fresh air, keep patient warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin Contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or a recognized skin cleaner. DO NOT USE SOLVENT OR THINNERS.

Ingestion: If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. DO NOT induce vomiting

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation

Inhalation : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness

Skin contact : No known significant effects or critical hazards

Ingestion : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
unconsciousness

Skin contact : No specific data

Ingestion : No specific data

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled

Specific treatments: No specific treatment.

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam

Unsuitable extinguishing media : Do not use water jet

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Flammable liquid and vapour. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials: carbon dioxide, carbon monoxide, phosphorous oxides, metal oxide/oxides

5.3 Advice for firefighters

Special precautions for Firefighters : Promptly isolate the scene by removing all persons from the vicinity of the incident there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool

Special protective equipment for firefighters : Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN469 will provide a basic level of protection for chemical incidents

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency Personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding area. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel."

6.2 Environmental Precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other Sections : See Section 1 for emergency contact information
See Section 8 for information appropriate personal protective equipment
See Section 13 for additional waste treatment information

7. HANDLING AND STORAGE

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)

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use non-sparking tools. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities : Storage temperature 5 to 25°C (41 to 77°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations : Not available

Industrial sector specific Solutions : Not available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Occupational exposure limits

Product / ingredient name	Exposure limit values
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin STEL: 560 mg/m ³ 15 minutes STEL: 150 ppm 15 minutes TWA: 375 mg/m ³ 8 hours TWA: 100 ppm 8 hours
propan-2-ol	EH40/2005 WELs (United Kingdom (UK), 12/2011) STEL: 1250 mg/m ³ 15 minutes STEL: 500 ppm 15 minutes TWA: 999 mg/m ³ 8 hours TWA 400 ppm 8hours
phosphoric acid	EH40/2005 WELs (United Kingdom (UK), 12/2011) STEL: 2 mg/m 15 minutes TWA: 1 mg/m 8 hours

Recommended monitoring Procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres – Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres – Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482

(Workplace atmospheres – General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs

DNELs – not available

PNECs

PNECs – not available

8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Chemical splash goggles and face shield

Skin protection

Hand Protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Gloves

: For prolonged or repeated handling, use the following type of gloves:

Recommended: nitrile rubber / nitrile neoprene

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the exposure limit they must use appropriate, certified respirators. Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state

: Liquid

Colour

: Clear

Odour

: Faint odour

pH

: Not available

Melting/freezing point

: Not available

Initial boiling point

: 100°C

Flash point

: Closed cup - 34°C

Evaporation rate	: Not available
Material supports combustion	: Yes
Flammability (solid, gas)	: Not available
Upper/lower flammability or explosive limits	: Upper 0%
Vapour pressure	: Highest known value: 4.4kPa (33 mm Hg) (at 20°C) (Isopropyl Alcohol) Weighted average: 2.76 kPa (20.7 mm Hg) (at 20°C)
Vapour density	: Highest known value: 3.11 (Air = 1) (1-methoxy-2-propanol). Weighted average: 2.61 (Air = 1)
Relative density	: 0.99
Solubility(ies)	: Partially soluble in the following materials: cold water
Partition coefficient: n-octanol/water	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
Viscosity	: Not applicable
Explosive properties	: Not available
Oxidising properties	: Not available

9.2 Other information

No additional information.

10. STABILITY AND REACTIVITY

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reaction will not occur

10.4 Conditions to avoid : When exposed to high temperature may produce hazardous decomposition products. Refer to protective measures listed in Sections 7 & 8

10.5 Incompatible materials: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Decomposition products may include the following materials carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product / ingredients name	Result	Species	Dose	Exposure
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13g/kg	-
	LD50 Oral	Rat	5.2g/kg	-
propan-2-ol	LC50 Inhalation Vapour	Rat	72600 mg/m ³	4 hours
	LD50 Dermal	Rabbit	12800 mg/kg	-
phosphoric acid	LD50 Oral	Rat	4.396 g/kg	-
	LD50 Dermal	Rabbit	2.74 g/kg	-
copper (II) carbonate- copper (II) hydroxide (1:1)	LD50 Oral	Rat	1.25 g/kg	-
	LD50 Oral	Rat	159 mg/kg	-

Conclusion/summary : Not available

Acute toxicity

Route	ATE value
Oral	50000 mg/kg

Irritation/Corrosion

Conclusion/Summary : Not available

Sensitiser

Conclusion/Summary : Not available

Mutagenicity**Conclusion/Summary** : Not available**Carcinogenicity****Conclusion/Summary** : Not available**Reproductive toxicity****Conclusion/Summary** : Not available**Teratogenicity****Conclusion/Summary** : Not available**Specific target organ toxicity (single exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
1-methoxy-2-propanol	Category 3	Not applicable	Narcotic effects
propan-2-ol	Category 3	Not applicable	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available

Aspiration hazard

Not available

Information on the likely routes of exposure – Not available**Potential acute health effects****Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness**Ingestion** : Can cause central nervous system (CNS) depression. Irritating to mouth, throat and stomach**Skin contact** : No known significant effects or critical hazards.**Eye contact** : Causes serious eye irritation**Symptoms related to the physical chemical and toxicological characteristics****Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue

unconsciousness

Ingestion : No specific data**Skin contact** : No specific data**Eye contact** : Adverse symptoms may include the following:

pain or irritation

watering

redness

Delayed and immediate effects and also chronic effects from short and long term exposure**Short term exposure****Potential immediate effects** : Not available**Potential delayed effects** : Not available**Long term exposure****Potential immediate effects** : Not available**Potential delayed effects** : Not available**Potential chronic health effects**

Not available

Conclusion/Summary : Not available**General** : No known significant effects or critical hazards**Carcinogenicity** : No known significant effects or critical hazards.**Mutagenicity** : No known significant effects or critical hazards.**Teratogenicity** : No known significant effects or critical hazards.**Developmental effects** : No known significant effects or critical hazards.**Fertility effects** : No known significant effects or critical hazards.**Other information** : Not available

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated Occupational Exposure Limit may result in adverse health effects such as irritation of the mucous membrane and respiratory system and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

12. ECOLOGICAL INFORMATION

12.1 Toxicity:

Product/ingredient name	Result	Species	Exposure
1-methoxy-2-propanol	Acute LC50 23300 mg/l	Daphnia	48 hours
propan-2-ol	Acute LC50 >4500 mg/l Fresh water	Fish	96 hours
	Acute LC50 1400000 to 19500000 µg/l Marine water	Crustaceans – Crangon crangon	48 hours
	Acute LC50 4200000 µg/l Fresh water	Fish – Rasbora heteromorpha	96 hours

Conclusion/Summary : Not available

12.2 Persistence and degradability:

Conclusion/Summary : Not available

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
propan-2-ol	0.05	-	Low

12.4 Mobility in soil

Soil/water partition Coefficient (Koc) : Not available

Mobility : Not available

Mobility : Not available

12.5 Results of PBT and vPvB assessment

PBT : Not applicable

vPvB : Not applicable

12.6 Other adverse effects : No known significant effects or critical hazards.

13. DISPOSAL CONSIDERATIONS

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)

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protections and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC

European waste catalogue (EWC)

Waste code	Waste designation
08 01 11*	Waste paint and varnish other than those mentioned in 08.01.11

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)
Container	15 01 04 metallic packaging

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14. TRANSPORT INFORMATION

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 proper shipping name	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL	PAINT RELATED MATERIAL
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 environmental hazards	No	Yes	No	No
Marine pollutant substances	Not applicable	Not applicable	Not applicable	Not applicable

Additional information

ADR/RID : None identified
Tunnel code : (D/E)
ADN : This product is only regulated as an environmentally hazardous substance when transported in tank vessels
IMDG : None identified
IATA : None identified

Special precautions for user: Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

15. REGULATORY INFORMATION

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV – List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Not applicable

Other EU regulations

15.2 Chemical Safety Assessment : No Chemical Safety Assessment has been carried out.

16. OTHER INFORMATION

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Full text of abbreviated H.

Statements

H225	Highly flammable liquid and vapour
H226	Flammable liquid and vapour
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H319	Causes serious eye irritation
H336	May cause drowsiness or dizziness (Narcotic Effects)
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Full text of classifications

[CLP/GHS]

Acute Tox. 4, H302	ACUTE TOXICITY (oral) – Category 4
Aquatic Acute 1, H400	ACUTE AQUATIC HAZARD – Category 1
Aquatic Chronic 1, H410	LONG-TERM AQUATIC HAZARD – Category 1
Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD – Category 3
Eye Dam. 1 H318	SERIOUS EYE DAMAGE/EYE IRRITATION – Category 1
Eye Irrit. 2, H319	SERIOUS EYE DAMAGE/EYE IRRITATION – Category 2
Flam. Liq. 2, H225	FLAMMABLE LIQUIDS – Category 2
Flam. Liq. 3, H226	FLAMMABLE LIQUIDS – Category 3
Skin Corr. 1B, H314	SKIN CORROSION/IRRITATION – Category 1B
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic Effects) – Category 3

Full text of abbreviated

R Phrases:

R11	Highly Flammable
R10	Flammable
R22	Harmful if swallowed
R34	Causes burns
R36	Irritating to eyes
R67	Vapours may cause drowsiness and dizziness
R50/51	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Full text of classifications

[DS/DPD]

F – Highly flammable
C – Corrosive
Xn – Harmful
Xi – Irritant
N – Dangerous for the environment

History

Date of Issue/date of revision 28th January 2014

Date of previous issue 21st January 2014

Prepared by – Intumescent Systems Ltd

Disclaimer

The information contained in this data sheet is based on present scientific and technical knowledge. The purpose of this information is to draw attention to the health and safety aspects concerning the products supplied by us, and to recommend precautionary measures for the storage and handling of the products. No warranty or guarantee is given in respect of the properties of the products. No liability can be accepted for any failure to observe the precautionary measures described in this data sheet or for any misuse of the products.



Product Number: 83 Mordant Solution

Description

A pre-treatment for use on galvanised steel before application of protection coatings.

Special properties

Converts the surface nature of galvanised steel to ensure adhesion of subsequent coatings.

Application

Thoroughly work Mordant Solution into the surface using a brush ensuring all the surface changes colour (blackens). If no initial reaction takes place, then a second application may be required. Rinse with clean water and allow to dry.

Coverage: Mordant Solution will treat approximately 15 square metres per litre

Drying Time: 30 minutes minimum – 24 hours maximum.

Thinner: not applicable

VOC Content: not applicable

Film Thickness: not applicable

Ordering references

Mordant Solution – available in 1litre, 2.5litre and 5 litre containers.

APPLICATION DATA SHEET



ENVIROGRAF®

AP083-MORDANT SOLUTION-03-2017

Product Number: 83 Mordant Solution

Description

A pre-treatment for use on galvanised steel before application of protection coatings.

Preparation

Ensure any oil and grease is removed from the surface to be treated. Allow the surface to dry before application of subsequent coating.

Application

Thoroughly work Mordant Solution into the surface using a brush ensuring all the surface changes colour (blackens). If no initial reaction takes place, then a second application may be required. Rinse with clean water and allow to dry.

Coverage: Mordant Solution will treat approximately 15 square metres per litre
Drying Time: 30 minutes minimum – 24 hours maximum.
Thinner: not applicable
VOC Content: not applicable
Film Thickness: not applicable

Precautions

- Irritating to eyes
- Contains: Propan-2-ol
- Use only in well ventilated areas
- Vapours may cause drowsiness and dizziness
- Avoid contact with skin and eyes
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- After contact with skin, wash immediately with plenty of water
- Wear suitable protective clothing, gloves and eye/face protection
- If swallowed, seek medical advice immediately and show the container or label
- Keep out of the reach of children.