

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

## MOULD ERADICATION ADDITIVE

Supercedes Date: 25-Apr-2018

## Revision Date 02-Jul-2018 Revision Number 1.01

# Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product Identifier

Product Name MOULD ERADICATION ADDITIVE

Pure substance/mixture Mixture

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

Recommended use	Biocidal Products (e.g. disinfectants, pest control).
Uses advised against	None known

1.3. Details of the supplier of the safety data sheet

#### **Company Name**

Airtech Environmental Systems Stathe Road, Burrowbridge, Somerset, TA7 0RY Tel: +44 (0) 1823 690 292 Fax: +44 (0) 1823 690 291

## E-mail address

info@airtechsolutions.co.uk

## 1.4. Emergency telephone number

Emergency Telephone

United Kingdom

## Section 2: HAZARDS IDENTIFICATION

## 2.1. Classification of the substance or mixture

## Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity - Oral	Category 4 - (H302)
Acute toxicity - Inhalation (Dusts/Mists)	Category 4 - (H332)
Skin Corrosion/Irritation	Category 2 - (H315)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitisation	Category 1 - (H317)
Specific target organ toxicity (repeated exposure)	Category 2 - (H373)
Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

## 2.2. Label Elements

## Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Contains Zinc pyrithione, 3-lodo-2-propynyl butylcarbamate, 2-octyl-2H-isothiazol-3-one

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Signal Word DANGER

## Hazard statements

- H332 Harmful if inhaled
- H410 Very toxic to aquatic life with long lasting effects
- H373 May cause damage to organs through prolonged or repeated exposure
- H315 Causes skin irritation
- H302 Harmful if swallowed
- H318 Causes serious eye damage
- H317 May cause an allergic skin reaction

## Precautionary Statements - EU (§28, 1272/2008)

- P101 If medical advice is needed, have product container or label at hand
- P102 Keep out of reach of children
- P260 Do not breathe dust/fume/gas/mist/vapours/spray
- P264 Wash face, hands and any exposed skin thoroughly after handling
- P271 Use only outdoors or in a well-ventilated area
- P273 Avoid release to the environment
- P280 Wear protective gloves
- P312 Call a POISON CENTER or doctor if you feel unwell

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

- P310 Immediately call a POISON CENTER or doctor
- P314 Get medical advice/attention if you feel unwell
- P391 Collect spillage
- P501 Dispose of contents/ container to an approved waste disposal plant

## Additional information

This product requires tactile warnings if supplied to the general public

## 2.3. Other Hazards

## **General Hazards**

No information available.

## PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

## 3.1 Substances

Mixture

## 3.2 Mixtures

Chemical Name	EC No.	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	REACH Registration Number
Zinc pyrithione	236-671-3	13463-41-7	10 - <20	Eye Dam. 1 (H318) Acute Tox. 3		01-2119511196-46 -XXXX

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Zinc oxide	215-222-5	1314-13-2	5 - <10	(H301) Acute Tox. 3 (H331) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Aquatic Acute 1		01-2119463881-32
				(H400) Aquatic Chronic 1 (H410)		-XXXX
3-lodo-2-propynyl butylcarbamate	259-627-5	55406-53-6	1 - <5	STOT RE 1 (H372) Eye Dam. 1 (H318) Skin Sens. 1 (H317) Acute Tox. 4 (H302) Acute Tox. 3 (H331) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)		No data available
2-octyl-2H-isothiazol-3-one	247-761-7	26530-20-1	1- <2.5	Acute Tox. 4 (H302) Acute Tox. 3 (H311) Acute Tox. 3 (H331) Skin Corr. 1B (H314) Skin Sens. 1 (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	Skin Sens. 1 :: C>=0.05%	No data available

Full text of H- and EUH-phrases: see section 16

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## Section 4: FIRST AID MEASURES

## 4.1. Description of first aid measures

Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. In the case of skin irritation or allergic reactions see a doctor.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. If eye irritation persists: Get medical advice/attention.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. If symptoms persist, call a doctor.
4.2. Most important symptoms and	d effects, both acute and delayed

Symptoms May cause allergic skin reaction.

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#### 4.3. Indication of any immediate medical attention and special treatment needed

Note to doctors

Treat symptomatically.

## Section 5: FIREFIGHTING MEASURES

## 5.1. Extinguishing media

## Suitable Extinguishing Media

Water spray (fog). Carbon dioxide (CO2). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## Unsuitable Extinguishing Media

None known

## 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapours.

Hazardous Combustion Products Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons.

## 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

## Section 6: ACCIDENTAL RELEASE MEASURES

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

#### **Personal Precautions**

Evacuate personnel to safe areas. Use personal protection recommended in Section 8.

## For emergency responders

Use personal protection recommended in Section 8.

## 6.2. Environmental precautions

Keep people away from and upwind of spill/leak.

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

- Methods for Containment Stop leak if you can do it without risk.
- Methods for cleaning upSoak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder,<br/>sawdust). Take up mechanically, placing in appropriate containers for disposal.

## 6.4. Reference to other sections

Reference to other sections Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION Section 13: DISPOSAL CONSIDERATIONS

## Section 7: HANDLING AND STORAGE

## 7.1. Precautions for safe handling

## Advice on safe handling

Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Handle in accordance with good industrial hygiene and safety practice. Do not re-use container.

## **General Hygiene Considerations**

Handle in accordance with good industrial hygiene and safety practice.

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## 7.2. Conditions for safe storage, including any incompatibilities

## **Storage Conditions**

Keep from freezing. Keep containers tightly closed in a cool, well-ventilated place.

#### 7.3. Specific end use(s)

#### **Other Information**

Recommendation(s). Observe technical data sheet.

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

Chemical Name	European Union	Ireland	United Kingdom
Zinc oxide	-	TWA: 2 mg/m <sup>3</sup>	-
1314-13-2		STEL: 10 mg/m <sup>3</sup>	

Derived No Effect Level (DNEL) No information available

**Predicted No Effect Concentration** No information available. (PNEC)

8.2. Exposure controls

**Engineering Controls** 

Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas. Use explosion-proof ventilating equipment.

## Personal Protective Equipment

Eye/Face Protection	Wear safety glasses with side shields (or goggles). Avoid contact with eyes. Gloves must conform to standard EN 374
Skin and Body Protection Respiratory Protection	Wear protective gloves and protective clothing. Avoid contact with skin, eyes or clothing. During spraying wear suitable respiratory equipment.
Environmental Exposure Controls	Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

## 9.1. Information on basic physical and chemical properties

Physical State Appearance Colour Odour Odour Threshold	Liquid Paste Off-white Slight No information available	
<u>Property</u> pH Melting point / freezing point Boiling point / boiling range Flash Point Evaporation Rate	Values 7.0 - 10.0 No information available No information available > 100 °C / > 212 °F No information available	Remarks • Method
Flammability (solid, gas) Flammability Limit in Air	No information available	Not applicable for liquids
Upper flammability or explosive limits	No information available	
Lower flammability or explosive limits	No information available	
Vapour Pressure Vapour Density Relative Density Water Solubility	No information available No information available 1.25 No information available	

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Solubility in Other Solvents	No information available
Partition Coefficient	No information available
Autoignition Temperature	No information available
Decomposition Temperature	No information available
Explosive Properties	Not an explosive
Oxidising Properties	Not applicable
Kinematic Viscosity	No information available
Dynamic Viscosity	No information available
9.2. Other information	
Softening Point	Not relevant
Molecular Weight	No information available
Solvent content (%)	No information available
Solid content (%)	No information available
Density	1.25 g/cm <sup>3</sup>
Bulk Density	No data available
VOC content (%)	

## Section 10: STABILITY AND REACTIVITY

## 10.1. Reactivity

None under normal use conditions.

## 10.2. Chemical stability

Stable under normal conditions.

Explosion Data Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

## 10.3. Possibility of hazardous reactions

Hazardous Polymerisation None known.

Possibility of Hazardous Reactions None under normal processing.

## 10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Keep from freezing.

## 10.5. Incompatible materials

No information available.

## 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons.

## Section 11: TOXICOLOGICAL INFORMATION

## 11.1. Information on toxicological effects

## Information on likely routes of exposure

#### **Product Information**

No information or data specific to the product on this toxicological (health) effect is available.

Inhalation

Harmful by inhalation.

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Eye contact	Corrosive to the eyes and may cause severe damage including blindness.
Skin Contact	Irritating to skin.
Ingestion	HARMFUL IF SWALLOWED.
Sensitisation	May cause sensitisation by skin contact.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin Corrosion/Irritation	Not applicable.
Serious eye damage/eye irritation	Not applicable.
Sensitisation	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Carcinogenicity	Not applicable.
Reproductive Toxicity	None known.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	Causes damage to organs through prolonged or repeated exposure.
Aspiration hazard	No information available.

Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)1,033.00 mg/kgATEmix (dermal)7,922.00 mg/kgATEmix (inhalation-dust/mist)4.00 mg/l

Component Information

## **Toxicity Data**

Data obtained on the component(s) include

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Zinc pyrithione 13463-41-7	= 177 mg/kg (Rat)	= 100 mg/kg (Rabbit)	0.05 - 0.5 mg/L (Rat)4 h = 140 mg/m³ (Rat)4 h
Zinc oxide 1314-13-2	> 5000 mg/kg (Rat)	LD50 >2000 mg/Kg (Rat) (OECD 402)	LC50 (4h) >5.7 mg/l
3-lodo-2-propynyl butylcarbamate 55406-53-6	LD50 =300-500 mg/Kg (Rat)	LD50 >2000 mg/Kg (Rat)	= 0.63 mg/L (Rat)4 h = 0.67 mg/L (Rat)4 h = 0.99 mg/L (Rat )4 h
2-octyl-2H-isothiazol-3-one 26530-20-1	= 550 mg/kg (Rat)	= 690 mg/kg (Rabbit)	-

## Section 12: ECOLOGICAL INFORMATION

## 12.1. Toxicity

Ecotoxicity

Very toxic to aquatic life

## Component Information

Chemical Name	Algae/aquatic plants	Fish	Crustacea	M-Factor
Zinc pyrithione	-	-	EC50 (48h) =0.038 mg/L	100

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13463-41-7			Crustaceans (Ilyocypris dentifera)	
Zinc oxide 1314-13-2	LC 50 (72Hr) 0.136 mg/L	LC50 (96h) =0.7 mg/L Fish (Danio rerio)	LC 50 (48Hr) =0.5 mg/l (Ceriodaphnia dubia)	1
3-lodo-2-propynyl butylcarbamate 55406-53-6	EC50 (72 hrs) 0.022 mg/l Scenedesmus subspicatus	LC50 96 h 0.049 - 0.079 mg/L (Oncorhynchus mykiss flow-through)	Acute EC50 (48hrs) 0.16 mg/l - Daphnia magna	10
2-octyl-2H-isothiazol-3-one 26530-20-1	EC50(72h) = 0.084 mg/L (Scenedesmus subspicatus) (OECD 201)	LC50 (96h) = 0.036 mg/L Fish (Oncorhynchus mykiss)	EC50 (48h) =0.25 mg/L	10

## 12.2. Persistence and degradability

Readily biodegradable.

## 12.3. Bioaccumulative potential

No information available.

Partition coefficient

No information available

12.4. Mobility in soil

Mobility in soil

No information available.

## 12.5. Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB.

## 12.6. Other adverse effects

No information available

## **Endocrine Disruptor Information**

This product does not contain any known or suspected endocrine disruptors.

## Section 13: DISPOSAL CONSIDERATIONS

## 13.1. Waste treatment methods

Waste from Residues/Unused Products	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Improper disposal or reuse of this container may be dangerous and illegal.

## Section 14: TRANSPORT INFORMATION

	Note:	
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Keep from freezing.

Land transport (ADR/RID)	
14.1 UN Number	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s (Zinc pyrithione,Zinc oxide)
14.3 Transport hazard class(es)	9
Labels	9
14.4 Packing Group	
Description	UN3082, Environmentally hazardous substances, liquid, n.o.s (Zinc pyrithione,Zinc oxide), 9, III
14.5 Environmental hazards	Yes
14.6 Special Provisions	274, 335, 601, 375
Classification Code	M6
Limited Quantity (LQ)	5 L

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ADR Hazard Id (Kemmler Number)	90
IMDG	
14.1 UN Number	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s (Zinc pyrithione, Zinc oxide), Marine Pollutant
14.3 Transport hazard class(es)	9
14.4 Packing Group	
Description	UN3082, Environmentally hazardous substances, liquid, n.o.s (Zinc pyrithione,Zinc oxide), 9, III, Marine Pollutant
14.5 Marine Pollutant	P
14.6 Special Provisions	274, 335, 969
Limited Quantity (LQ)	5 L
EmS-No	F-A, S-F
14.7 Transport in bulk according	to Annex II of MARPOL 73/78 and the IBC Code Not relevent
Air transport (ICAO-TI / IATA-DGR	

14.1 UN Number	UN3082
14.2 Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s (Zinc pyrithione, Zinc oxide)
14.3 Transport hazard class(es)	9
14.4 Packing Group	
Description	UN3082, Environmentally hazardous substances, liquid, n.o.s (Zinc pyrithione, Zinc
	oxide), 9, III
14.5 Environmental hazards	Yes
14.6 Special Provisions	A97, A158, A197
Limited Quantity (LQ)	30 kg G
ERG Code	9L

## Section 15: REGULATORY INFORMATION

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

## European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

## Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

## EU-REACH (1907/2006) - Candidate List of Substances of Very High Concern (SVHC) for Authorization in accordance with Article 59

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

## EU-REACH (1907/2006) - Annex XIV - List of substances subject to Authorization

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

## Dangerous substance category per Seveso Directive (2012/18/EU)

E1 - Hazardous to the Aquatic

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Environment in Category Acute 1 or Chronic 1

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 Not applicable

Persistent Organic Pollutants Not applicable

## 15.2. Chemical safety assessment

None

## Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

## Full text of H-Statements referred to under section 3

H400 - Very toxic to aquatic life H410 - Very toxic to aquatic life with long lasting effects H318 - Causes serious eye damage H301 - Toxic if swallowed H331 - Toxic if inhaled H302 - Harmful if swallowed H311 - Toxic in contact with skin H314 - Causes severe skin burns and eye damage H317 - May cause an allergic skin reaction H372 - Causes damage to organs through prolonged or repeated exposure Legend SVHC: Substances of Very High Concern for Authorisation: Legend Section 8: Exposure controls and personal protection TWA (time-weighted average) STEL (Short Term Exposure Limit) TWA STEL Skin designation Ceilina Maximum limit value PBT Persistent, Bioaccumulative, and Toxic (PBT) Chemicals STOT (RE): Specific target organ toxicity - Repeated exposure STOT (SE): Specific target organ toxicity - Single exposure EWC: European Waste Catalogue

#### Key literature references and sources for data

Classification and labeling data calculated from data received from raw material suppliers

Prepared By	Product Safety & Regulatory Affairs
Revision Date	02-Jul-2018
Indication of changes	
Revision Note	Not applicable.
Training Advice	No information available
Further information	No information available

## This safety data sheet complies with the requirements of: Regulation (EC) No. 1907/2006

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of

United Kingdom, Ireland - BE

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its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet