Tom's Studio,
Unit N3 Marshall Way,
Frome,
BA11 2FB

Safety Data Sheet according to UN GHS, Regulation (EC) No. 1907/2006 (REACH), Regulation (EU) No. 2020/878 Annex II, Regulation (EC) No. 1272/2008 (CLP) and GB CLP
Water-based ink HLD Pastel, HLD Glitter, AAM B100*, AAM 1000*, FC Red and Green
****all colours except those covered by DS514, DS540***
Data Sheet No: DS515 Version No: 007 Issue Date: 11th June 2024 Page 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1: Product identifier

UFI Code: WD10-200V-G00W-83GJ
Trade name: Water-based ink, HLD Pastel, AAM B100*, AAM 1000*, FC Red and Green Substance name: n/a
Index No: n/a
CAS-No: n/a
EC-No: n/a
HS Tariff code: 3215907090

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

Use of the substance/mixture: Preparation for use in writing instruments. Recommended restrictions on use: No information available.

1.3: Details of the suppler of the safety data sheet

Company: Tom's Studio, Unit N3 Marshall Way, Frome, BA11 2FB
Telephone: +44 1434 606 085
Fax: +44 1434 601 804
e-mail: hello@tomsstudio.co.uk

1.4: Emergency telephone number

+44 7887 612 787

SECTION 2: Hazards Identification

2.1: Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 and GB

CLP **2.2: Label Elements**

No labelling according to Regulation (EC) No. 1272/2008 and GB CLP

2.3: Other hazards

EUH208 – Contains 1,2-benzisothiazol-3(2H)-one and a reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one for preservation during storage. May produce an allergic reaction.

SECTION 3: Composition / information on ingredients

3.1: Substances

Not applicable

3.2: Mixtures

Substance name	CAS No. EC No. Index No. Registration No.	% (weight)	Classification according to Regulation (EC) No. 1272/2008 (CLP) and GB MCL	SCL, M-factor, ATE
2,2'-oxybisethanol	111-46-6 203-872-2 603-140-00-6 01-2119457857-21	<10%	H302 (4), H373 (2)	Inhalation 4.6 µg/m³ Dermal LD50 13 330 mg/kg bw
Acid Black 24	3071-73-6 221-343-4 - -	≤6%	H319 (2)	Oral LD50 2 000 mg/kg bw (rat)
Acid Red 87	17372-87-1 241-409-6 - -	<0.4%	H317 (1), H319 (2)	Oral LD50 2 000 mg/kg bw (rat) Dermal LD50 2 000 mg/kg bw (rat)
Biocide containing 1,2-benzisothiazol 3(2H)-one (BIT) Reaction mass of 5-chloro-2-methyl-4-iso thiazolin-3-one and 2-methyl-2H-isothiazol-3- one	BIT 2634-33-5 220-120-9 613-088-00-6 01-2120761540-60 CMIT/MIT 55965-84-9 911-418-6 613-167-00-5 01-2120764691-48	BIT ≤0.02% CMIT/ MIT ≤0.00 1%	H318 (1), H315 (2), H317 (1), H410 (1)	BIT Oral LD50 490 - 670 mg/kg bw (rat) Dermal LD50 2 000 mg/kg bw (rat) Skin Sens. 1; H317: C ≥ 0,05 % CMIT/MIT Oral LD50 64 - 561 mg/kg bw (rat) Inhalation LC50 (4 h)
				171 - 2360 mg/m³ air (rat) Dermal LD50 87.12 - 660 mg/kg bw (rabbit) Skin Sens. 1A; H317:C ≥ 0,015 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: Description of first aid measures

4.1: Description of first aid measures

4.1.1: General advice:

Take off all contaminated clothing immediately.

4.1.2: In case of inhalation:

Remove to fresh air. If symptoms persist, seek medical advice. If unconscious place in recovery position.

4.1.3: In case of skin contact:

Wash off with plenty of water. If skin irritation persists, seek medical advice.

4.1.4: In case of eye contact:

Rinse thoroughly with plenty of water, also under the eyelids. Consult an eye specialist immediately.

4.1.5: In case of ingestion:

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. If swallowed, seek medical advice immediately and show this container or label.

4.1.6: Self-protection for first aider:

Wear appropriate PPE to prevent contamination of skin, eyes and personal clothing.

4.2: Most important symptoms and effects, both acute and delayed

No further information available.

4.3: Indication of immediate medical attention and special treatment needed

Treat symptomatically. No further information available

SECTION 5: Firefighting measures

5.1: Extinguishing media

5.1.1: Suitable extinguishing media:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray, alcohol-resistant foam, dry chemical or carbon dioxide (do not use carbon dioxide in enclosed spaces)..

5.1.2: Unsuitable extinguishing media:

High volume water jet.

5.2: Special hazards arising from the substance or mixture

In case of fire hazardous decomposition products may be produced, such as carbon monoxide (CO) and carbon dioxide (CO_2).

5.3: Advice for firefighter

5.3.1: Special protective equipment for firefighters:

In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit).

5.3.2: Further information:

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1: Personal precautions, protective equipment and emergency procedures

6.1.1: For non-emergency personnel

Protective equipment:
Wear appropriate PPE to prevent contamination of skin, eyes and personal clothing.

Emergency procedures:
Avoid contact with skin and eyes.

6.1.2: For emergency responders

Tight fitting safety goggles, appropriate gloves, and protective clothing (please refer to Section 8).

6.2: Environmental precautions

Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. Do not allow to contaminate ground water system.

6.3: Methods and materials for containment and cleaning up

6.3.1: For containment

Contain spillage using bunding. Cover drains where possible. Re-cap leaking containers and take whatever steps possible to prevent further leakage.

6.3.2 – For cleaning up

Collect with non-combustible absorbent material (for example, sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local/national regulations (see Section 13).

6.3.3 – Other information

Treat recovered material as described in Section 13.

6.4: Reference to other sections

For personal protection see Section 8.

Section 7: Handling and storage

7.1: Precautions for safe handling

7.1.1: Protective measures:

Keep container tightly closed. Avoid contact with skin and eyes. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

7.1.2: Measures to prevent fire:

No special measures required.

7.1.3: Measures to prevent aerosol and dust generation:

Avoid generating any spray mist.

7.1.4: Measures to protect the environment:

Do not let product enter drains. If the product contaminates rivers and lakes or drains inform respective authorities.

7.1.5: Advice on general occupational hygiene:

Keep away from food, drink, and animal feeding stuffs. Eating, and drinking should be prohibited in the application area. Wash hands before breaks and at the end of the working day. Take off all contaminated clothing.

7.2: Conditions for safe storage, including any incompatibilities

7.2.1: Technical measures and storage conditions:

Store tightly closed in a cool and dry place**.**

7.2.2: Packaging materials:

Store tightly closed in original container.

7.2.3: Requirements for storage rooms and vessels:

Protect from frost and avoid direct contact with cold floors. Keep away from direct sunlight.

7.2.4 – Further information on storage conditions:

Store tightly closed in a cool and dry place. Store tightly closed in original container. Protect from frost and avoid direct contact with cold floors. Keep away from direct sunlight. Keep in a well-ventilated place. Keep away from food, drink and animal feedstuffs.

7.3: Specific end use(s)

7.3.1: Recommendations:

Preparation for use in writing instruments. Please refer to sections 7.1 and 7.2

7.3.2: Industrial sector specific solutions:

No information available.

SECTION 8: Exposure controls/personal protection

8.1: Control parameters

SUBSTANCE NAME: 2,2'-oxybisethanol								
EC number: 203-872-2					**CAS number: 111-46-6**			
DNELs								
Route of exposure	**Workers**				**Consumers**			
	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					No hazard identified	No hazard identified	No hazard identified
Inhalation	No hazard identified	No hazard identified	60 mg/m^3	44 mg/m^3	No hazard identified	No hazard identified	12 mg/m^3	12 mg/m^3
Dermal	No hazard identified	No hazard identified	No hazard identified	43 mg/kg bw/day	No hazard identified	No hazard identified	No hazard identified	21 mg/kg bw/day

PNECs	
Environmental protection target	PNEC
Fresh water	No data available
Freshwater sediments	No data available
Marine water	No data available
Marine sediments	No data available
Food chain	No data available
Microorganisms in sewage treatment	No data available
Soil (agricultural)	No data available
Air	No data available

SUBSTANCE NAME: Acid Black 24								
EC number: 221-343-4					**CAS number: 3071-73-6**			
DNELs								
Route of exposure	**Workers**				**Consumers**			
	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					No hazard identified	No hazard identified	833 µg/kg bw/day
Inhalation	Low hazard (no threshold derived)	No hazard identified	Low hazard (no threshold derived)	8.22 mg/m^3	Low hazard (no threshold derived)	No hazard identified	Low hazard (no threshold derived)	1.25 mg/m^3
Dermal	No hazard identified	No hazard identified	No hazard identified	Low hazard (no threshold derived)	No hazard identified	No hazard identified	Low hazard (no threshold derived)	Low hazard (no threshold derived)

PNECs	
Environmental protection target	PNEC
Fresh water	77.3 µg/L
Freshwater sediments	315 µg/kg d.w.
Marine water	7.73 µg/L
Marine sediments	31.5 µg/kg d.w.
Food chain	No hazard identified
Microorganisms in sewage treatment	10 mg/L
Soil (agricultural)	17.6 µg/kg d.w.
Air	No hazard identified

SUBSTANCE NAME: 1,2-benzisothiazol-3(2H)-one								
EC number: 220-120-9					**CAS number: 2634-33-5**			
DNELs								
Route of exposure	**Workers**				**Consumers**			
	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required					No hazard identified	No hazard identified	No hazard identified
Inhalation	No hazard identified	No hazard identified	No hazard identified	6.81 mg/m^3	No hazard identified	No hazard identified	No hazard identified	1.2 mg/m^3

Dermal	High hazard (no threshold derived)	No hazard identified	High hazard (no threshold derived)	966 µg/kg bw/day	High hazard (no threshold derived)	No hazard identified	High hazard (no threshold derived)	345 µg/kg bw/day

PNECs	
Environmental protection target	PNEC
Fresh water	4.03 µg/L
Freshwater sediments	49.9 µg/kg d.w.
Marine water	403 ng/L
Marine sediments	4.99 µg/kg d.w.
Food chain	No hazard identified
Microorganisms in sewage treatment	1.03 mg/L
Soil (agricultural)	3 mg/kg d.w.
Air	No hazard identified

SUBSTANCE NAME: Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one

EC number: 911-418-6 | **CAS number: 55965-84-9**

DNELs

Route of exposure	**Workers**				**Consumers**			
	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic	Acute effects local	Acute effects systemic	Chronic effects local	Chronic effects systemic
Oral	Not required							90 µg/kg bw/day
Inhalation	40 µg/m^3	No hazard identified	20 µg/m^3	No hazard identified	40 µg/m^3	No hazard identified	20 µg/m^3	No hazard identified
Dermal	Medium hazard (no threshold derived)	No hazard identified	No hazard identified	No hazard identified	Medium hazard (no threshold derived)	No hazard identified	No hazard identified	No hazard identified

PNECs	
Environmental protection target	PNEC
Fresh water	3.39 µg/L
Freshwater sediments	27 µg/kg d.w.
Marine water	3.39 µg/L
Marine sediments	27 µg/kg d.w.

Food chain	No hazard identified
Microorganisms in sewage treatment	230 µg/L
Soil (agricultural)	10 µg/kg d.w.
Air	No hazard identified

8.2: Exposure controls

8.2.1: Appropriate engineering controls:

Ensure adequate ventilation. Refer to protective measures listed in Sections 7 and 8.

8.2.2: Individual protection measures, such as personal protective equipment:

8.2.2.1: Eye/face protection:

Tight fitting safety goggles.

8.2.2.2: Skin protection:

Hand protection:
Wear suitable gloves. Take note of the information given by the producer concerning permeability and breakthrough times, and of special workplace conditions (mechanical strain, duration of contact). Protective gloves should be replaced at first signs of wear. Butyl rubber, 0.5 mm, Fluorocarbon rubber, 0.4 mm.

Other skin protection:
Wear suitable protective clothing.

8.2.2.3: Respiratory protection:

Not necessary if room well ventilated.

8.2.2.4: Thermal hazards:

Not applicable.

8.2.3: Environmental exposure controls:

Do not let product enter drains. If the product contaminates rivers and lakes or drains inform respective authorities. Refer to section 6 for further information.

SECTION 9: Physical and chemical properties

9.1: Information on basic physical and chemical properties

Physical state: liquid
Colour: various
Odour: Neutral, odour threshold - no data available Melting point / freezing point: 0°C (water)
Boiling point: 100°C (water)

Flammability: Not applicable
Upper/lower flammability or explosive limits: Not applicable
Flash point: Not applicable
Auto-ignition temperature: Not applicable
Decomposition temperature: Not applicable (only applies to self-reactive substances and mixtures)
pH: 6 to 8 (100%)
Viscosity: 1 to 5 mm^2/s
Solubility: Miscible in water
Partition coefficient: n-octanol/water: Not applicable (does not apply to mixtures) Vapour pressure: No data available

Absolute density: 1.05 g/cm^3
Relative density: 1.01 g/cm^3
Particle characteristics: Not applicable (only applies to solids)

9.2 - Other information

No further relevant information available.

SECTION 10: Stability and reactivity

10.1 – Reactivity

Stable under normal storage conditions.

10.2 - Chemical Stability

Stable under normal storage conditions.

10.3 – Possibility of hazardous reactions

Stable under normal storage conditions.

10.4 – Conditions to avoid

Keep away from direct sunlight. Protect from frost.

10.5 – Incompatible materials

Stable under normal storage conditions.

10.6 – Hazardous decomposition products

Under fire conditions: carbon monoxide (CO), carbon dioxide (CO_2).

SECTION 11 – Toxicological information

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

11.1.1 – Acute toxicity

2,1'-oxybisethanol (CAS No. 111-46-6)
Oral
No data available

Inhalation
No adverse effect observed Discriminating conc. 4.6 µg/m³
Dermal
No adverse effect observed LD50 13 330 mg/kg bw
Other routes
No data available

Acid Black 24 (CAS No. 3071-73-6)
Oral
LD50 2 000 mg/kg bw
Inhalation
No data available
Dermal
No data available
Other routes
No data available

Acid Red 87 (CAS No. 17372-87-1)
Oral
LD50 2 000 mg/kg bw
Inhalation
No data available

Dermal
LD50 2 000 mg/kg bw
Other routes
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Oral
LD50 490 - 670 mg/kg bw
Inhalation
No data available
Dermal
LD50 2 000 mg/kg bw
Other routes
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Oral
LD50 64 - 561 mg/kg bw
Inhalation
LC50 (4 h) 171 - 2 360 mg/m³ air
Dermal
LD50 87.12 - 660 mg/kg bw
Other routes
No data available

11.1.2 – Skin corrosion/irritation

2,1'-oxybisethanol (CAS No. 111-46-6)
Skin
No adverse effect observed (not irritating)

Acid Black 24 (CAS No. 3071-73-6)
Skin
No adverse effect observed (not irritating)

Acid Red 87 (CAS No. 17372-87-1)
No adverse effect observed (not irritating)

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No adverse effect observed (not irritating)

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Adverse effect observed (corrosive)

11.1.3 – Serious eye damage/irritation

2,1'-oxybisethanol (CAS No. 111-46-6)
No adverse effect observed (not irritating)

Acid Black 24 (CAS No. 3071-73-6)
Adverse effect observed (irritating)

Acid Red 87 (CAS No. 17372-87-1)
Adverse effect observed (irritating)

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Adverse effect observed (irreversible damage)

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Adverse effect observed (irreversible damage)

11.1.4 – Respiratory or skin sensitisation

2,1'-oxybisethanol (CAS No. 111-46-6)

Skin
No adverse effect observed (not irritating)
Respiratory
No data available

Acid Black 24 (CAS No. 3071-73-6)
Skin
Adverse effect observed (sensitising)
Respiratory
No data available

Acid Red 87 (CAS No. 17372-87-1)
Skin
No adverse effect observed (not sensitising)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Skin
Adverse effect observed (sensitising)
Respiratory
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Skin
Adverse effect observed (sensitising)
Respiratory
No data available

11.1.5 – Germ cell mutagenicity

2,1'-oxybisethanol (CAS No. 111-46-6)
Toxicity – InVitro
No adverse effect observed (negative)

Acid Black 24 (CAS No. 3071-73-6)
Toxicity – InVitro
No adverse effect observed (negative)

Acid Red 87 (CAS No. 17372-87-1)
Toxicity – InVitro
No adverse effect observed (negative)

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Toxicity – InVitro
No adverse effect observed (negative)

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Toxicity – InVitro
No adverse effect observed (negative)

11.1.6 – Carcinogenicity

2,1'-oxybisethanol (CAS No. 111-46-6)
Oral
Adverse effect observed NOAEL 1 160 mg/kg bw/day (chronic, rat)

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available
Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Oral

No adverse effect observed NOAEL 17.2 mg/kg bw/day (chronic, rat)

11.1.7 – Reproductive toxicity

2,1'-oxybisethanol (CAS No. 111-46-6)
Effect on fertility – oral route
No adverse effect observed NOAEL 3 060 mg/kg bw/day (subacute, mouse)

Acid Black 24 (CAS No. 3071-73-6)
Effect on fertility – oral route
No adverse effect observed NOAEL 1 000 mg/kg bw/day (subacute, rat)
Effect on developmental toxicity – oral route
No data available

Acid Red 87 (CAS No. 17372-87-1)
Effect on fertility – oral route
No adverse effect observed NOAEL 1 000 mg/kg bw/day (subacute, rat)
Effect on developmental toxicity – oral route
No adverse effect observed NOAEL 1 000 mg/kg bw/day (subacute, rat)

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Effect on fertility – oral route
No adverse effect observed NOAEL 112 mg/kg bw/day (subchronic, rat)
Effect on developmental toxicity – oral route
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Effect on fertility – oral route
No adverse effect observed NOAEL 22.7 mg/kg bw/day (subchronic, rat)
Effect on developmental toxicity – oral route
No adverse effect observed NOAEL 100 mg/kg bw/day (subchronic, rat)

11.1.8 – Summary of evaluation of the CMR properties

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

11.1.9 – STOT-single exposure

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

11.1.10 – STOT-repeated exposure

2,1'-oxybisethanol (CAS No. 111-46-6)
Oral
Adverse effect observed NOAEL 300 mg/kg bw/day (subchronic, rat)
Inhalation
No data available
Dermal
No adverse effect observed NOAEL 4 440 mg/kg bw/day (subacute, dog)

Acid Black 24 (CAS No. 3071-73-6)
Oral
No adverse effect observed NOAEL 500 mg/kg bw/day (subacute, rat)
Inhalation
No data available
Dermal
No data available

Acid Red 87 (CAS No. 17372-87-1)
Oral
No adverse effect observed NOAEL 1 000 mg/kg bw/day (subchronic, rat)
Inhalation
No data available
Dermal
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Oral
Adverse effect observed NOAEL 69 mg/kg bw/day (subchronic, rat)
Inhalation
No data available
Dermal
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Oral
Adverse effect observed NOAEL 69 mg/kg bw/day (subchronic, rat)
Inhalation
No data available
Dermal
No data available

11.1.11 – Aspiration hazard

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

SECTION 12 – Ecological information

12.1 – Toxicity

12.1.1 – Acute (short term) toxicity fish

2,1'-oxybisethanol (CAS No. 111-46-6)
LC50 (4 days) 75.2 g/L

Acid Black 24 (CAS No. 3071-73-6)
LC50 (4 days) 77.3 mg/L

Acid Red 87 (CAS No. 17372-87-1)
LC50 (4 days) 100 mg/L

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
LC50 (4 days) 2.15 – 22 mg/L

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) LC50 (4 days) 190 – 300 µg/L

12.1.2 – Acute (short term) toxicity crustacea

2,1'-oxybisethanol (CAS No. 111-46-6)
EC50 (24 h) 10 g/L

Acid Black 24 (CAS No. 3071-73-6)
EC50 (48 h) 220 mg/L

Acid Red 87 (CAS No. 17372-87-1)
EC50 (48 h) 100 mg/L

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
EC50 (48 h) 2.9 – 2.94 mg/L

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) EC50 (48 h) 7 - 160 µg/L

12.1.3 – Acute (short term) toxicity algae/aquatic plants

2,1'-oxybisethanol (CAS No. 111-46-6)
Algae
EC50 (4 days) 6.5 - 13 g/L
Aquatic plants other than algae
No data available

Acid Black 24 (CAS No. 3071-73-6)
Algae
No data available
Aquatic plants other than algae
EC50 (7 days) 2.45 g/L

Acid Red 87 (CAS No. 17372-87-1)
Algae
EC50 (72 h) 51.3 mg/L
Aquatic plants other than algae
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Algae
EC50 (72 h) 70 – 150 µg/L
Aquatic plants other than algae
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Algae
EC50 (72 h) 6.3 - 27.3 µg/L
Aquatic plants other than algae

No data available

12.1.4 – Acute (short term) toxicity other organisms

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
Microorganisms
NOEC (4.167 h) 100 mg/L

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Microorganisms
EC50 (3 h) 12.8 – 24 mg/L

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Microorganisms
EC50 (3 h) 4.5 mg/L

12.1.5 – Chronic (long term) toxicity fish

2,1'-oxybisethanol (CAS No. 111-46-6)
NOEC (7 days) 15.38 - 32 g/L

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) NOEC (35 days) 46.4 µg/L

12.1.6 – Chronic (long term) toxicity crustacea

2,1'-oxybisethanol (CAS No. 111-46-6)
NOEC (7 days) 8.59 - 24 g/L

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) NOEC (21 days) 11.1 - 1 050 µg/L

12.1.7 – Chronic (long term) toxicity algae/aquatic plants

2,1'-oxybisethanol (CAS No. 111-46-6)
Algae
EC50 (4 days) 6.5 - 13 g/L
Aquatic plants other than algae
No data available

Acid Black 24 (CAS No. 3071-73-6)
Algae
No data available

Aquatic plants other than algae
No data available

Acid Red 87 (CAS No. 17372-87-1)
Algae
No data available
Aquatic plants other than algae
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Algae
No data available
Aquatic plants other than algae
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Algae
No data available
Aquatic plants other than algae
No data available

12.1.8 – Chronic (long term) toxicity other organisms

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Terrestrial macroorganisms except arthropods
EC10 / LC10 / NOEC 234.5 mg/kg soil dw
Terrestrial plants
EC10 / LC10 / NOEC (50 days) 30 mg/kg soil dw

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Terrestrial macroorganisms except arthropods
NOEC (14 days) 710 - 14 300 µg/kg soil dw
Terrestrial plants
NOEC (21 days) 2.7 - 1 000 mg/kg soil dw
Birds
LC50 (8 days) 945 - 3 532.46 mg/kg diet

12.2 - Persistence and biodegradability

12.2.1 – Abiotic degradation

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available
Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.2.2 – Physical and photo-chemical elimination

2,1'-oxybisethanol (CAS No. 111-46-6)
Phototransformation in air
Dissipation half life (DT50)
17.24 h

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Phototransformation in air
Dissipation half life (DT50)
7.568 h

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Phototransformation in air
Dissipation half life (DT50)
12.6 - 29.9 h

12.2.3 – Biodegradation

2,1'-oxybisethanol (CAS No. 111-46-6)
Biodegradation in water – screening tests
Readily biodegradable (100%)

Acid Black 24 (CAS No. 3071-73-6)
Biodegradation in water – screening tests
Not biodegradable (100%)

Acid Red 87 (CAS No. 17372-87-1)
Biodegradation in water – screening tests
Readily biodegradable (100%)

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Biodegradation in water – screening tests
No biodegradation observed (100%)
Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9)
Biodegradation in water – screening tests
Inherently biodegradable (100%)

12.3 – Bioaccumulative potential

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.3.1 – Partition coefficient n-octanol / water (log Kow)

2,1'-oxybisethanol (CAS No. 111-46-6)
-1.98 @ 20 °C

Acid Black 24 (CAS No. 3071-73-6)

-0.657 @ 20 °C

Acid Red 87 (CAS No. 17372-87-1)
-1.33 @ 20 °C

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
0.7 @ 20 °C

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) 0.75

12.3.2 – Bioconcentration factor (BCF)

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
56 L/kg ww

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
6.62

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.4 – Mobility in soil

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.4.1 – Known or predicted distribution to environmental compartments

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.4.2 – Surface tension

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
72.6 mN/m @ 1 g/L and 20 °C

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) 72.3 mN/m @ 1 000 mg/L

12.4.3 – Adsorption/desorption

2,1'-oxybisethanol (CAS No. 111-46-6)
Koc 1 L/kg @ 25 °C

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
Koc 10.568 @20 °C

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
Koc 9.33 @ 20 °C

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) Koc 6.4 - 310.385 @ 20 °C

12.5 – Results of PBT and vPvB assessment

2,1'-oxybisethanol (CAS No. 111-46-6)
This substance is not a PBT or a vPvB

Acid Black 24 (CAS No. 3071-73-6)
This substance is not a PBT or a vPvB

Acid Red 87 (CAS No. 17372-87-1)
This substance is not a PBT or a vPvB

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
This substance is not a PBT or a vPvB

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) This substance is not a PBT or a vPvB

12.6 – Endocrine disrupting properties

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)
No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.7 – Other adverse effects

2,1'-oxybisethanol (CAS No. 111-46-6)
No data available

Acid Black 24 (CAS No. 3071-73-6)
No data available

Acid Red 87 (CAS No. 17372-87-1)

No data available

1,2-benzisothiazol-3(2H)-one (CAS No. 2634-33-5)
No data available

Reaction mass of 5-chloro-2-methyl-4-iso-thiazolin-3-one and 2-methyl-2H-isothiazol-3-one (CAS No. 55965-84-9) No data available

12.8 – Additional information

No additional information available.

SECTION 13 – Disposal considerations

13.1 – Waste treatment methods

13.1.1 – Product / Packaging disposal

Disposal together with normal waste is not allowed. Special disposal is required according to regional, national, and European legislation. Do not empty into drains. Contact waste disposal services. Contaminated packaging should be emptied thoroughly. It can be recycled after thorough and proper cleaning. Packaging that cannot be cleaned should be disposed of in the same manner as the product. Do not burn or use a cutting torch on the empty drum. Risk of explosion.

13.1.2 – Waste treatment – relevant information

No information available – treat as hazardous waste and dispose of in accordance with regional, national and European legislation.

13.1.3 – Sewage disposal – relevant information

Do not allow to enter the sewage system.

13.1.4 – Other disposal recommendations

No further information available.

SECTION 14 – Transport Information

14.1 - UN Number

Not dangerous goods for ADR, RID, IMDG and IATA-DGR

14.2 – UN proper shipping name

ADR: not applicable
RID: not applicable
IMDG: not applicable
IATA-DGR : not applicable

14.3 – Transport hazardous class(es)

Labels/classification code/ hazard identification number/tunnel restriction code
ADR: not applicable
RID: not applicable
IMDG : not applicable
IATA-DGR : not applicable

14.4 - Packing group

ADR: not applicable
RID: not applicable
IMDG: not applicable
IATA-DGR : not applicable

14.5 - Environmental hazards

Labelling according to 5.2.1.8 ADR: No

Labelling according to 5.2.1.8 RID: No
Labelling according to 5.2.1.6.3 IMDG: No
Labelling according to IATA-DGR: No
Classification as environmentally hazardous according to 2.9.3 IMDG: No
Classified as 'P' according to 2.10 IMDG: No

14.6 - Special precautions for user

No information available.

14.7 – Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15 – Regulatory Information

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

Regulation (EC) No. 1907/2006 (REACH)
Regulation (EC) No. 2020/878 Annex II
Regulation (EC) No. 1272/2008 (CLP)
Regulation (EC) No 1907/2006 (REACH), Article 57 SVHC Candidate list – none
UN GHS
GB CLP
GB MCL

International Inventories:

Europe (EINECS): all components are listed or exempt
US (TSCA): all components are listed or exempt
Canada (DSL/NDSL): all components are listed or exempt
Japan (ENCS): at least one component is not listed
Philippines (PICCS): all components are listed or exempt
China (IECSC): all components are listed or exempt
Australia (AICS): at least one component is not listed
Korea (KECL): at least one component is not determined
New Zealand (NZIoC): all components are listed or exempt
Taiwan (TCSI): all components are listed or exempt

15.2 - Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16 – Other Information

16.1 – Indication of changes

SDS amended in accordance with Regulation (EC) No. 2020/878 Annex II

16.2 – Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (The European Agreement concerning the International Carriage of Dangerous Goods by Road). ATE: Acute Toxicity Estimate
BCF: Bio Concentration Factor
CLP: Classification, Labelling and Packaging
DNEL: Derived No Effect Level
DT50: Half life
EC: European Commission
EC50: Effective Concentration Limit (half maximal)
GB CLP: Great Britain Classification, Labelling and Packaging
GB MCL: Great Britain Mandatory Classification List
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods

LC50: Lethal Concentration (50% of sample population)
LD50: Lethal Dose (50% of sample population)
M-Factor: Multiplying Factor
NOAEC: No Observed Adverse Effect Concentration
NOAEL: No Observed Adverse Effect Level
PBT: Persistent, bioaccumulative and toxic
PNEC: Predicted No Effect Concentration
PPE: Personal Protective Equipment
RID: Regulations Concerning the International Transport of Dangerous Goods by Rail SCL:
Specific Concentration Limit
STOT: Specific Target Organ Toxicity
UFI: Unique Formula Identifier code
UN GHS: United Nations Globally Harmonised System
vPvB: Very persistent, very bioaccumulative

16.3 - Key literature references and sources for data

European Chemicals Agency (ECHA) - information on chemicals

16.4 – Classification and procedures used to derive the classification for mixtures according to Regulation (EC) No. 1272/2008 (CLP) and GB CLP

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008 and GB

CLP **16.5 – Relevant H-statements (number and full text)**

H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause and allergic skin reaction.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H373: May cause damage to organs through prolonged or repeated exposure.
H410: Very toxic to aquatic life with long lasting effects.

16.6 - Training advice

None.

16.7 - Further information

Colour names:
AAM B101 Cyan, AAM B102 Yellow, AAB B105 Pink, AAM B107 Magenta, AAM B108 Burgundy, AAM B109 Cherry, AAM B110 Midnight, AAM B112 Clear
AAM 1001 Light Blue, AAM 1002 Mid Blue, AAM 1003 Blue, AAM 1004 Airforce Blue, AAM 1005 Blush, AAM 1006 Rose pink, AAM 1007 Dark Pink, AAM 1008 Purple, AAM 1009 Grape, AAM 1010 Khaki, AAM 1011 Racing Green, AAM 1012 Dark Green, AAM 1013 Turquoise, AAM 1014 Lime, AAM 1015 Light Green, AAM 1016 Yellow, AAM 1017 Apricot, AAM 1018 Orange, AAM 1019 Burgundy, AAM 1020 Satin, AAM 1021 Mauve, AAM 1022 Light Brown, AAM1023 Dark Brown, AAM 1024 Light Grey, AAM 1025 Summer Sky, AAM 1026 Brown Grey, AAM 1027 Black, AAM 1028 Red
HLD83 Pastel Rosewater, Lavender, Sherbet, Mint, Peppermint, Blueberry, Lemon, Erica, Cherry Blossom, Peach, Red Apple, Apricot, Lime, Cornflower, Periwinkle, Coco