

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 21-6-2018 Revision date: 17-1-2023 Supersedes version of: 18-10-2022 Version: 3.0

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

## 1.1. Product identifier

Product form : Mixture

Product name : DYE SUBLIMATION INK SB610 BLUE T

Product code : SB610-BLT-(2L/BJ/BA)

Product group : Trade product

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

#### 1.2.1. Relevant identified uses

Main use category : Industrial use, Professional use

Title	Use descriptors
DYE SUBLIMATION INK SB610 BLUE T	SU0, PC18, PROC1

Full text of use descriptors: see section 16

#### 1.2.2. Uses advised against

No additional information available

## 1.3. Details of the supplier of the safety data sheet

Mimaki Europe B.V. Stammerdijk 7E 1112 AA Diemen Netherlands T +31 20 4627640

reach@mimakieurope.com

UPLI DATA

## 1.4. Emergency telephone number

Emergency number : National Poisons Information Centre +31 (0)30 - 274 8888

(Only for the purpose of informing medical personnel in cases of accidental intoxications.

The emergency phone number is 24 hours/day available.)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER London	+44 20 7188 7188	

## **SECTION 2: Hazards identification**

## 2.1. Classification of the substance or mixture

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

Not classified

#### Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

## 2.2. Label elements

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

EUH-statements : EUH208 - Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.

EUH210 - Safety data sheet available on request.

17-1-2023 (Revision date) EN (English) 1/11

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### 2.3. Other hazards

Contains no PBT/vPvB substances ≥ 0.1% assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## **SECTION 3: Composition/information on ingredients**

#### 3.1. Substances

Not applicable

## 3.2. Mixtures

Name	Product identifier	% w/w (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Propane-1,2-diol substance with national workplace exposure limit(s) (GB)	CAS-No.: 57-55-6 EC-No.: 200-338-0 REACH-no: 01-2119456809- 23	10 – 20	Not classified
Glycerol substance with national workplace exposure limit(s) (GB)	CAS-No.: 56-81-5 EC-No.: 200-289-5 REACH-no: 01-2119471987- 18	10 – 20	Not classified
1,2-benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-	< 0,1	Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400

Specific concentration limits:		
Name	Product identifier	Specific concentration limits
1,2-benzisothiazol-3(2H)-one	CAS-No.: 2634-33-5 EC-No.: 220-120-9 EC Index-No.: 613-088-00-6 REACH-no: 01-2120761540-	( 0,05 ≤C ≤ 100) Skin Sens. 1, H317

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

## SECTION 4: First aid measures

## 4.1. Description of first aid measures

First-aid measures after inhalation : Move to fresh air. Respiratory arrest: artificial respiration or oxygen. Seek medical attention immediately.

First-aid measures after skin contact : Wash skin with mild soap and water. Wash contaminated clothing before reuse. Obtain medical attention if irritation persists.

: Rinse immediately with plenty of water for 15 minutes. Seek medical attention if ill effect or

irritation develops.

First-aid measures after ingestion : Seek medical attention if ill effect develops. Call a poison center or a doctor if you feel unwell.

## 4.2. Most important symptoms and effects, both acute and delayed

No additional information available

First-aid measures after eye contact

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

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

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Carbon dioxide (CO2). Water. Water spray. Foam.

Unsuitable extinguishing media : None.

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

Hazardous decomposition products in case of fire : Toxic fumes may be released.

#### 5.3. Advice for firefighters

Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

Self-contained breathing apparatus. Complete protective clothing.

#### **SECTION 6: Accidental release measures**

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

#### 6.1.1. For non-emergency personnel

Protective equipment

Emergency procedures

Equip cleanup crew with proper protection.

Ventilate spillage area.

#### 6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment.

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

Methods for cleaning up : Take up liquid spill into absorbent material. Sweep or shovel spills into appropriate container

for disposal.

Other information : Wash skin with mild soap and water. Dispose of materials or solid residues at an authorized

site.

## 6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8. Concerning disposal elimination after cleaning, see section 13.

## SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Do not get

in eyes, on skin, or on clothing. Keep out of the reach of children.

Hygiene measures : For even minor contact, immediately remove contaminated clothing. Wash skin thoroughly with mild soap and water. Do not eat, drink or smoke when using this product. Always wash

hands after handling the product.

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

Storage conditions : Store in a dry place. Keep cool. Store in a well-ventilated place.

Information on mixed storage : Oxidation agents. Explosives.

Storage area : Avoid: Extremely high or low temperatures. Keep out of direct sunlight.

17-1-2023 (Revision date) EN (English) 3/11

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

## 8.1. Control parameters

## 8.1.1 National occupational exposure and biological limit values

Propane-1,2-diol (57-55-6)		
United Kingdom - Occupational Exposure Limits		
Local name	Propane-1,2-diol	
WEL TWA (OEL TWA) [1]	10 mg/m³ particulates 474 mg/m³ total vapour and particulates	
WEL TWA (OEL TWA) [2]	150 ppm total vapour and particulates	
Regulatory reference	reference EH40/2005 (Fourth edition, 2020). HSE	
Glycerol (56-81-5)		
United Kingdom - Occupational Exposure Limits		
Local name	Glycerol	
WEL TWA (OEL TWA) [1]	10 mg/m³ mist	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

li-data.fr

#### 8.1.2. Recommended monitoring procedures

No additional information available

## 8.1.3. Air contaminants formed

No additional information available

## 8.1.4. DNEL and PNEC

S.T.A. DNEE and TNEO		
1,2-benzisothiazol-3(2H)-one (2634-33-5)		
DNEL/DMEL (Workers)		
Long-term - systemic effects, dermal	966 µg/kg dw	
Long-term - systemic effects, inhalation	6,81 mg/m³	
DNEL/DMEL (General population)		
Long-term - systemic effects, inhalation	1,2 mg/m³	
Long-term - systemic effects, dermal	345 μg/kg dw	
PNEC (Water)		
PNEC aqua (freshwater)	4,03 μg/L	
PNEC aqua (marine water)	403 ng/l	
PNEC aqua (intermittent, freshwater)	1,1 μg/L	
PNEC aqua (intermittent, marine water)	110 ng/l	
PNEC (Sediment)		
PNEC sediment (freshwater)	49,9 mg/kg dwt	
PNEC sediment (marine water)	4,99 mg/kg dwt	
PNEC (Soil)		
PNEC soil	3 mg/kg dwt	

17-1-2023 (Revision date) EN (English) 4/11

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
PNEC (STP)	
PNEC sewage treatment plant	1,03 mg/l

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Where contact with eyes or skin is likely, wear suitable protection. Gloves. Protective clothing. Safety glasses.

#### Personal protective equipment symbol(s):







#### 8.2.2.1. Eye and face protection

#### Eye protection:

Eye protection should only be necessary where liquid could be splashed or sprayed. Chemical goggles or safety glasses (acc. EN 166)

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Wear suitable protective clothing. Standard. EN 13034

#### Hand protection:

Use neoprene gloves. Layer thickness: Not applicable. Breakthrough time (EN 374-3:2003): >480 (www.echa.europa.eu)

#### 8.2.2.3. Respiratory protection

#### Respiratory protection:

Where excessive vapour may result, wear approved mask. Dust production: dust mask with filter type P2. Standard. EN 143. EN 14387

#### 8.2.2.4. Thermal hazards

No additional information available

#### 8.2.3. Environmental exposure controls

#### **Environmental exposure controls:**

Avoid release to the environment.

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

: Liquid Physical state : Blue. Colour Odour : Not available Odour threshold : Not available : Not applicable Melting point Freezing point Not available Not available Boiling point Not applicable Flammability **Explosive limits** Not available Lower explosion limit Not available Upper explosion limit : Not available Flash point : Not available

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Auto-ignition temperature : Not available Decomposition temperature : Not available Not available рΗ Not available Viscosity, kinematic Solubility Not available Partition coefficient n-octanol/water (Log Kow) Not available Vapour pressure Not available Vapour pressure at 50°C Not available Density : Not available Relative density Not available Relative vapour density at 20°C : Not available Particle characteristics : Not applicable

#### 9.2. Other information

#### 9.2.1. Information with regard to physical hazard classes

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : 17,04 %

## SECTION 10: Stability and reactivity

## 10.1. Reactivity

Stable under normal conditions.

#### 10.2. Chemical stability

Stable under normal conditions.

## 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Extremely high or low temperatures.

## 10.5. Incompatible materials

Oxidizing agent. Blasting agent.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## **SECTION 11: Toxicological information**

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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Propane-1,2-diol (57-55-6)		
LD50 oral rat	22000 mg/kg bodyweight Animal: rat	
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit	
LC50 Inhalation - Rat	> 44,9 mg/l air Animal: rat, Guideline: other:, Remarks on results: other:	
Glycerol (56-81-5)		
LD50 oral rat	27 mg/kg bodyweight Animal: rat, Animal sex: female	

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

1-amino-4-(ethylamino) -9,10-dihydro-9 ,10-dioxoantraceen-2-carbonitrile (62570-50-7)		
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity)	
1,2-benzisothiazol-3(2H)-one (2634-33-	5)	
LD50 oral rat	490 – 670 mg/kg	
LD50 dermal rat	2000 mg/kg	
Skin corrosion/irritation	: Slightly irritant but not relevant for classification	
Serious eye damage/irritation	: Slightly irritant but not relevant for classification	
Respiratory or skin sensitisation	: Not classified	
Germ cell mutagenicity	: Not classified	
Carcinogenicity	: Not classified	
Reproductive toxicity	: Not classified	
1,2-benzisothiazol-3(2H)-one (2634-33-	-5)	
NOAEL (animal/female, F1)	56,6 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: EPA OPPTS 870.380 (Reproduction and Fertility Effects)	
STOT-single exposure	: Not classified	
STOT-repeated exposure	: Not classified	
Propane-1,2-diol (57-55-6)		
NOAEL (subchronic, oral, animal/male, 90 day	/s) 443 mg/kg bodyweight Animal: cat, Animal sex: male	
1-amino-4-(ethylamino) -9,10-dihydro-	9 ,10-dioxoantraceen-2-carbonitrile (62570-50-7)	
NOAEL (oral, rat, 90 days)	≥ 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents), Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)	
1,2-benzisothiazol-3(2H)-one (2634-33-	5)	
NOAEL (oral, rat, 90 days)	69 – 150 mg/kg bodyweight/day	
Aspiration hazard	: Not classified	

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

## 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse

effects in the environment.

: Not classified

Hazardous to the aquatic environment, short-term

(acute)

Hazardous to the aquatic environment, long-term : Not classified

(chronic)

(ornerino)	
Propane-1,2-diol (57-55-6)	
LC50 - Fish [1]	51400 mg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	51600 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 72h - Algae [1]	19300 mg/l Test organisms (species): Skeletonema costatum

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Property 4.0 diel (57.55.0)		
Propane-1,2-diol (57-55-6)		
EC50 72h - Algae [2]	24200 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
EC50 96h - Algae [1]	19100 mg/l Test organisms (species): Skeletonema costatum	
EC50 96h - Algae [2]	19000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)	
Glycerol (56-81-5)		
LC50 - Fish [1]	54000 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
1-amino-4-(ethylamino) -9,10-dihydro-9 ,10-dioxoantraceen-2-carbonitrile (62570-50-7)		
EC50 - Crustacea [1]	> 2,6 μg/l Test organisms (species): Daphnia magna	
1,2-benzisothiazol-3(2H)-one (2634-33-5)		
LC50 - Fish [1]	2,15 – 22 mg/l	
LC50 - Fish [2]	2,15 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)	
EC50 - Crustacea [1]	2,9 – 2,94 mg/l	
EC50 - Crustacea [2]	2,9 mg/l Test organisms (species): Daphnia magna	
EC50 72h - Algae [1]	70 – 150 μg/L	

## 12.2. Persistence and degradability

No additional information available

## 12.3. Bioaccumulative potential

1,2-benzisothiazol-3(2H)-one (2634-33-5)	
Bioconcentration factor (BCF REACH)	6,62
Partition coefficient n-octanol/water (Log Pow)	0,7 @ 20°C

## 12.4. Mobility in soil

No additional information available

## 12.5. Results of PBT and vPvB assessment

No additional information available

## 12.6. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Waste treatment methods

European List of Waste (LoW) code

Waste treatment methods Product/Packaging disposal recommendations

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Dispose in a safe manner in accordance with local/national regulations.
- : 08 03 12\* waste ink containing dangerous substances

17-1-2023 (Revision date) EN (English) 8/11

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

#### **SECTION 14: Transport information**

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID	
14.1. UN number or ID number					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.2. UN proper shipping name					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.3. Transport hazard class(es)					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.4. Packing group					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.5. Environmental hazards					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
No supplementary information available					

#### 14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

w.dupli-data.fr

Inland waterway transport

Not regulated

Rail transport

Not regulated

## 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

## 15.1.1. EU-Regulations

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

Contains no substance(s) listed on the REACH Candidate List

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

VOC content : 17,04 %

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

#### 15.1.2. National regulations

No additional information available

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

## 15.2. Chemical safety assessment

No chemical safety assessment has been carried out for the substance or the mixture by the supplier

## **SECTION 16: Other information**

Indication of changes				
Section	Changed item	Change	Comments	
	Supersedes	Modified		
	Revision date	Modified		
3	Composition/information on ingredients	Modified		
15.1	REACH Annex XVII	Removed		

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
IMDG	International Maritime Dangerous Goods	
IATA	International Air Transport Association	
EC50 \/\/\\	Median effective concentration	
IARC	International Agency for Research on Cancer	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
PBT	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
STP	Sewage treatment plant	
TLM	Median Tolerance Limit	
SDS	Safety Data Sheet	
vPvB	Very Persistent and Very Bioaccumulative	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Abbreviations and acronyms:	
COD	Chemical oxygen demand (COD)
EC-No.	European Community number
EN	European Standard
OEL	Occupational Exposure Limit
ThOD	Theoretical oxygen demand (ThOD)
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
ED	Endocrine disrupting properties

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:		
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4	
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1	
EUH208	Contains 1,2-benzisothiazol-3(2H)-one. May produce an allergic reaction.	
EUH210	Safety data sheet available on request.	
Eye Dam. 1	Serious eye damage/eye irritation, Category 1	
H302	Harmful if swallowed.	
H315	Causes skin irritation.	
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H400	Very toxic to aquatic life.	
Skin Irrit. 2	Skin corrosion/irritation, Category 2	
Skin Sens. 1	Skin sensitisation, Category 1	

Full text of use descriptors	
PC18	Ink and Toners
PROC1	Chemical production or refinery in closed process without likelihood of exposure or processes with equivalent containment conditions
SU0	Other

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.