

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

1.1. Product identifier

Product form : Mixture
Product name : SS21 INK CYAN
Product code : SPC-0501C-3
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 : Professional use
Industrial/Professional use spec : Industrial
For professional use only

Title	Use descriptors
SS21 INK CYAN	SU22, 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

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.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category H318
1

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger
Hazardous ingredients : γ -butyrolactone
Hazard statements (CLP) : H318 - Causes serious eye damage
Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection.
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 doctor, a POISON CENTER.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
γ -butyrolactone	(CAS-No.) 96-48-0 (REACH-no) 01-2119471839-21	10 - 20	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Move to fresh air. If you feel unwell, seek medical advice (show the label where possible). Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Keep victim warm and rested. Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/effects after eye contact	: Causes serious eye damage.
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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. Foam. Carbon dioxide (CO ₂). Sand. Water spray.
Unsuitable extinguishing media	: Heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Remove ignition sources.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.

5.3. Advice for firefighters

Precautionary measures fire	: Eliminate ignition sources.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Exclude sources of ignition and ventilate the area.
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6.1.1. For non-emergency personnel

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Good ventilation of the workplace required. Where contact with eyes or skin is likely, wear suitable protection. Use grounded electrical/mechanical equipment. Non-sparking tools should be used.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure that there is a suitable ventilation system.

Storage conditions : Keep away from sources of ignition - No smoking. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage area : No naked flames. Avoid : All heat sources, including direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

SS21 INK CYAN		
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m ³)	3,5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	7 mg/m ³

γ-butyrolactone (96-48-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	958 mg/m ³
Long-term - systemic effects, dermal	19 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	130 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	340 mg/m ³
Long-term - systemic effects, oral	8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	28 mg/m ³
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,056 mg/l
PNEC aqua (marine water)	0,006 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,24 mg/kg dwt
PNEC sediment (marine water)	0,02 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,015 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	452 mg/l

8.2. Exposure controls

Personal protective equipment:

Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.

Hand protection:

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Wear suitable gloves resistant to chemical penetration. Wear rubber gloves (0.75mm). The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu)

Eye protection:

Chemical goggles or safety glasses (acc. EN 166)

Skin and body protection:

If skin contact or contamination of clothing is possible, protective clothing should be worn

Respiratory protection:

Do not inhale vapour. Supplied air respirator if working in a confined area



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Cyan.
Odour	: slight.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 176 - 204 °C
Flash point	: 71,1 °C
Auto-ignition temperature	: 169 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,966 Relative density, liquid (water=1)
Solubility	: Water: Not miscible
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 2 - 33 vol %

9.2. Other information

VOC content	: < 30 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Reacts with : Strong alkalis. Strong acids.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.4. Conditions to avoid

Ignition sources. Extremely high or low temperatures. Direct sunlight. Sparks. Moisture.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal use. At high temperature may liberate dangerous gases. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

γ-butyrolactone (96-48-0)	
LD50 oral rat	1582 mg/kg
LC50 inhalation rat (mg/l)	5,1 mg/l/4h

Skin corrosion/irritation : Not classified

pH: Not applicable

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye damage.

pH: Not applicable

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

γ-butyrolactone (96-48-0)	
NOAEL (oral, rat, 90 days)	225 - 450 mg/kg bodyweight/day

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

γ-butyrolactone (96-48-0)	
LC50 fish 1	> 100 mg/l 24h
EC50 Daphnia 1	> 500 mg/l
EC50 72h algae (1)	1000 mg/l
LOEC (acute)	< 7,81 mg/l 72h
NOEC (acute)	> 18 mg/l 96h

12.2. Persistence and degradability

SS21 INK CYAN	
Persistence and degradability	Not established.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.3. Bioaccumulative potential

SS21 INK CYAN	
Bioaccumulative potential	Not established.
γ-butyrolactone (96-48-0)	
Log Pow	-0,566 @ 25 °C and pH 6 - 8

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 08 03 12* - waste ink containing dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

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3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	γ-butyrolactone
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	SS21 INK CYAN - γ-butyrolactone

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : < 30 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
2.2	Precautionary statements (CLP)	Modified	

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.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H302	Harmful if swallowed.
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness.
PC18	Ink and Toners
PROC1	Use in closed process, no likelihood of exposure
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SDS EU (REACH Annex II)

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable

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

1.1. Product identifier

Product form : Mixture
Product name : SS21 INK BLACK
Product code : SPC-0501K-2
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 : Professional use
Industrial/Professional use spec : Industrial
For professional use only

Title	Use descriptors
SS21 INK BLACK	SU22, 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

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.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category H318
1

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger
Hazardous ingredients : γ -butyrolactone
Hazard statements (CLP) : H318 - Causes serious eye damage
Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection.
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 doctor, a POISON CENTER.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
γ-butyrolactone	(CAS-No.) 96-48-0 (REACH-no) 01-2119471839-21	10 - 20	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 STOT SE 3, H336
Carbon black substance with national workplace exposure limit(s) (GB)	(CAS-No.) 1333-86-4 (EC-No.) 215-609-9 (REACH-no) 01-2119384822-32	2,5 - 10	Not classified

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Move to fresh air. If you feel unwell, seek medical advice (show the label where possible). Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Keep victim warm and rested. Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/effects after eye contact	: Causes serious eye damage.
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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. Foam. Carbon dioxide (CO ₂). Sand. Water spray.
Unsuitable extinguishing media	: Heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Remove ignition sources.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.

5.3. Advice for firefighters

Precautionary measures fire	: Eliminate ignition sources.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Exclude sources of ignition and ventilate the area.
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6.1.1. For non-emergency personnel

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Good ventilation of the workplace required. Where contact with eyes or skin is likely, wear suitable protection. Use grounded electrical/mechanical equipment. Non-sparking tools should be used.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure that there is a suitable ventilation system.

Storage conditions : Keep away from sources of ignition - No smoking. Keep container closed when not in use.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage area : No naked flames. Avoid : All heat sources, including direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

SS21 INK BLACK		
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m ³)	3,5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	7 mg/m ³

Carbon black (1333-86-4)		
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m ³)	3,5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	7 mg/m ³

γ-butyrolactone (96-48-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	958 mg/m ³
Long-term - systemic effects, dermal	19 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	130 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	340 mg/m ³
Long-term - systemic effects, oral	8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	28 mg/m ³
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,056 mg/l
PNEC aqua (marine water)	0,006 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,24 mg/kg dwt
PNEC sediment (marine water)	0,02 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,015 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	452 mg/l

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

8.2. Exposure controls

Personal protective equipment:

Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Wear rubber gloves (0.75mm). The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu)

Eye protection:

Chemical goggles or safety glasses (acc. EN 166)

Skin and body protection:

If skin contact or contamination of clothing is possible, protective clothing should be worn

Respiratory protection:

Do not inhale vapour. Supplied air respirator if working in a confined area



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Black.
Odour	: slight.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 176 - 204 °C
Flash point	: 71,1 °C
Auto-ignition temperature	: 169 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: 267 kPa (20°C)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,975 Relative density, liquid (water=1)
Solubility	: Water: Not miscible
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 2 - 33 vol %

9.2. Other information

VOC content : < 20 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable.

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Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Reacts with : Strong alkalis. Strong acids.

10.4. Conditions to avoid

Ignition sources. Extremely high or low temperatures. Direct sunlight. Sparks. Moisture.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal use. At high temperature may liberate dangerous gases. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

Carbon black (1333-86-4)

LD50 oral rat > 8000 mg/kg

LC50 inhalation rat (mg/l) > 4,6 mg/m³

γ-butyrolactone (96-48-0)

LD50 oral rat 1582 mg/kg

LC50 inhalation rat (mg/l) 5,1 mg/l/4h

Skin corrosion/irritation : Not classified

pH: Not applicable

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye damage.

pH: Not applicable

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

γ-butyrolactone (96-48-0)

NOAEL (oral, rat, 90 days) 225 - 450 mg/kg bodyweight/day

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

γ-butyrolactone (96-48-0)

LC50 fish 1 > 100 mg/l 24h

EC50 Daphnia 1 > 500 mg/l

SS21 INK BLACK

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

γ-butyrolactone (96-48-0)

EC50 72h algae (1)	1000 mg/l
LOEC (acute)	< 7,81 mg/l 72h
NOEC (acute)	> 18 mg/l 96h

12.2. Persistence and degradability

SS21 INK BLACK

Persistence and degradability	Not established.
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Carbon black (1333-86-4)

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

SS21 INK BLACK

Bioaccumulative potential	Not established.
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Carbon black (1333-86-4)

Bioaccumulative potential	Not established.
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γ-butyrolactone (96-48-0)

Log Pow	-0,566 @ 25 °C and pH 6 - 8
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12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 08 03 12* - waste ink containing dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

SS21 INK BLACK

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	γ-butyrolactone
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	SS21 INK BLACK - γ-butyrolactone

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : < 20 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
2.2	Precautionary statements (CLP)	Modified	

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.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H302	Harmful if swallowed.
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness.
PC18	Ink and Toners
PROC1	Use in closed process, no likelihood of exposure
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SDS EU (REACH Annex II)

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable

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

1.1. Product identifier

Product form : Mixture
Product name : SS21 INK MAGENTA
Product code : SPC-0501M-2
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 : Professional use
Industrial/Professional use spec : Industrial
For professional use only

Title	Use descriptors
SS21 INK MAGENTA	SU22, 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

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.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category H318
1

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger
Hazardous ingredients : γ -butyrolactone
Hazard statements (CLP) : H318 - Causes serious eye damage
Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection.
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 doctor, a POISON CENTER.

SS21 INK MAGENTA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-methoxy-1-methylethyl acetate substance with a Community workplace exposure limit substance with national workplace exposure limit(s) (GB)	(CAS-No.) 108-65-6 (EC-No.) 203-603-9 (EC Index-No.) 607-195-00-7 (REACH-no) 01-2119475791-29	10-20	Flam. Liq. 3, H226
γ-butyrolactone	(CAS-No.) 96-48-0 (REACH-no) 01-2119471839-21	10 - 20	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Move to fresh air. If you feel unwell, seek medical advice (show the label where possible). Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Keep victim warm and rested. Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/effects after eye contact	: Causes serious eye damage.
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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. Foam. Carbon dioxide (CO ₂). Sand. Water spray.
Unsuitable extinguishing media	: Heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Remove ignition sources.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.

5.3. Advice for firefighters

Precautionary measures fire	: Eliminate ignition sources.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Exclude sources of ignition and ventilate the area.
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6.1.1. For non-emergency personnel

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Evacuate unnecessary personnel.

SS21 INK MAGENTA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Good ventilation of the workplace required. Where contact with eyes or skin is likely, wear suitable protection. Use grounded electrical/mechanical equipment. Non-sparking tools should be used.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure that there is a suitable ventilation system.
Storage conditions : Keep away from sources of ignition - No smoking. Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.
Storage area : No naked flames. Avoid : All heat sources, including direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

SS21 INK MAGENTA		
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m ³)	3,5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	7 mg/m ³
2-methoxy-1-methylethyl acetate (108-65-6)		
EU	Local name	2-Methoxy-1-methylethylacetate
EU	IOELV TWA (mg/m ³)	275 mg/m ³
EU	IOELV TWA (ppm)	50 ppm
EU	IOELV STEL (mg/m ³)	550 mg/m ³
EU	IOELV STEL (ppm)	100 ppm
EU	Notes	Skin
United Kingdom	Local name	1-Methoxypropyl acetate
United Kingdom	WEL TWA (mg/m ³)	274 mg/m ³
United Kingdom	WEL TWA (ppm)	50 ppm
United Kingdom	WEL STEL (mg/m ³)	548 mg/m ³
United Kingdom	WEL STEL (ppm)	100 ppm
United Kingdom	Remark (WEL)	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)

2-methoxy-1-methylethyl acetate (108-65-6)	
DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	153,5 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	275 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	1,67 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	33 mg/m ³
Long-term - systemic effects, dermal	54,8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,635 mg/l

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2-methoxy-1-methylethyl acetate (108-65-6)	
PNEC aqua (marine water)	0,0635 mg/l
PNEC aqua (intermittent, freshwater)	6,35 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	3,29 mg/kg dwt
PNEC sediment (marine water)	0,329 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,29 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	100 mg/l
γ-butyrolactone (96-48-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	958 mg/m ³
Long-term - systemic effects, dermal	19 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	130 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	340 mg/m ³
Long-term - systemic effects, oral	8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	28 mg/m ³
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,056 mg/l
PNEC aqua (marine water)	0,006 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,24 mg/kg dwt
PNEC sediment (marine water)	0,02 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,015 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	452 mg/l

8.2. Exposure controls

Personal protective equipment:

Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.

Hand protection:

Wear suitable gloves resistant to chemical penetration. Wear rubber gloves (0.75mm). The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu)

Eye protection:

Chemical goggles or safety glasses (acc. EN 166)

Skin and body protection:

If skin contact or contamination of clothing is possible, protective clothing should be worn

Respiratory protection:

Do not inhale vapour. Supplied air respirator if working in a confined area



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Magenta.

SS21 INK MAGENTA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Odour	: slight.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -68 °C
Freezing point	: No data available
Boiling point	: 147 - 204 °C
Flash point	: 64,2 °C
Auto-ignition temperature	: 169 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: 2,67 kPa (20°)
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,97 g/l Relative density, liquid (water=1)
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1,5 - 33 vol %

9.2. Other information

VOC content	: 35 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Reacts with : Strong alkalis. Strong acids.

10.4. Conditions to avoid

Ignition sources. Extremely high or low temperatures. Direct sunlight. Sparks. Moisture.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal use. At high temperature may liberate dangerous gases. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

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

2-methoxy-1-methylethyl acetate (108-65-6)	
LD50 oral rat	8532 mg/kg
LD50 dermal rat	> 2000 mg/kg bw/day
5,12-dihydro-2,9-dimethylquino[2,3-b]acridine-7,14-dione (980-26-7)	
LD50 oral rat	> 10000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 3,1 mg/l
γ-butyrolactone (96-48-0)	
LD50 oral rat	1582 mg/kg
LC50 inhalation rat (mg/l)	5,1 mg/l/4h

SS21 INK MAGENTA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Skin corrosion/irritation	: Not classified pH: Not applicable
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye damage. pH: Not applicable
Respiratory or skin sensitisation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Germ cell mutagenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Carcinogenicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Reproductive toxicity	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-single exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met
STOT-repeated exposure	: Not classified
Additional information	: Based on available data, the classification criteria are not met

γ-butyrolactone (96-48-0)

NOAEL (oral, rat, 90 days)	225 - 450 mg/kg bodyweight/day
Aspiration hazard	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Potential adverse human health effects and symptoms	: Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity	: Not classified
Chronic aquatic toxicity	: Not classified

2-methoxy-1-methylethyl acetate (108-65-6)

LC50 fish 1	100 - 180 mg/l 96h
LC50 other aquatic organisms 1	> 500 mg/l daphnia
LOEC (acute)	> 1000 mg/l 96h
NOEC (acute)	>= 1000 mg/l 96h
NOEC (chronic)	47,5 mg/l 14d

5,12-dihydro-2,9-dimethylquino[2,3-b]acridine-7,14-dione (980-26-7)

LC50 fish 1	> 100 mg/l
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γ-butyrolactone (96-48-0)

LC50 fish 1	> 100 mg/l 24h
EC50 Daphnia 1	> 500 mg/l
EC50 72h algae (1)	1000 mg/l
LOEC (acute)	< 7,81 mg/l 72h
NOEC (acute)	> 18 mg/l 96h

12.2. Persistence and degradability

SS21 INK MAGENTA

Persistence and degradability	Not established.
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12.3. Bioaccumulative potential

SS21 INK MAGENTA

Bioaccumulative potential	Not established.
---------------------------	------------------

γ-butyrolactone (96-48-0)

Log Pow	-0,566 @ 25 °C and pH 6 - 8
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12.4. Mobility in soil

No additional information available

SS21 INK MAGENTA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 08 03 12* - waste ink containing dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	SS21 INK MAGENTA - 2-methoxy-1-methylethyl acetate - γ -butyrolactone
3(a) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F	2-methoxy-1-methylethyl acetate
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	SS21 INK MAGENTA - γ -butyrolactone

SS21 INK MAGENTA

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

40. Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not.	2-methoxy-1-methylethyl acetate
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Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : 35 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
2.2	Precautionary statements (CLP)	Modified	

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.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Flam. Liq. 3	Flammable liquids, Category 3
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness.
PC18	Ink and Toners
PROC1	Use in closed process, no likelihood of exposure
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SDS EU (REACH Annex II)

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable

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

1.1. Product identifier

Product form : Mixture
Product name : SS21 INK YELLOW
Product code : SPC-0501Y
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 : Professional use
Industrial/Professional use spec : Industrial
For professional use only

Title	Use descriptors
SS21 INK YELLOW	SU22, 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

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.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Serious eye damage/eye irritation, Category H318
1

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS05

Signal word (CLP) : Danger
Hazardous ingredients : γ -butyrolactone
Hazard statements (CLP) : H318 - Causes serious eye damage
Precautionary statements (CLP) : P280 - Wear protective gloves, eye protection.
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 doctor, a POISON CENTER.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	Conc. (% w/w)	Classification according to Regulation (EC) No. 1272/2008 [CLP]
γ -butyrolactone	(CAS-No.) 96-48-0 (REACH-no) 01-2119471839-21	10 - 20	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 STOT SE 3, H336

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation	: Move to fresh air. If you feel unwell, seek medical advice (show the label where possible). Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.
First-aid measures after eye contact	: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
First-aid measures after ingestion	: Keep victim warm and rested. Obtain emergency medical attention. Rinse mouth. Do NOT induce vomiting.

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

Symptoms/effects after eye contact	: Causes serious eye damage.
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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. Foam. Carbon dioxide (CO ₂). Sand. Water spray.
Unsuitable extinguishing media	: Heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard	: Remove ignition sources.
Reactivity in case of fire	: At high temperature may liberate dangerous gases.

5.3. Advice for firefighters

Precautionary measures fire	: Eliminate ignition sources.
Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire fighting water from entering the environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Exclude sources of ignition and ventilate the area.
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6.1.1. For non-emergency personnel

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment	: Equip cleanup crew with proper protection.
Emergency procedures	: Ventilate area.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Clean up any spills as soon as possible, using an absorbent material to collect it. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

Concerning personal protective equipment to use, see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Good ventilation of the workplace required. Where contact with eyes or skin is likely, wear suitable protection. Use grounded electrical/mechanical equipment. Non-sparking tools should be used.

Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure that there is a suitable ventilation system.
Storage conditions : Keep away from sources of ignition - No smoking. Keep container closed when not in use.
Incompatible products : Strong bases. Strong acids.
Incompatible materials : Sources of ignition. Direct sunlight.
Storage area : No naked flames. Avoid : All heat sources, including direct sunlight.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

SS21 INK YELLOW		
United Kingdom	Local name	Carbon black
United Kingdom	WEL TWA (mg/m ³)	3,5 mg/m ³
United Kingdom	WEL STEL (mg/m ³)	7 mg/m ³

γ-butyrolactone (96-48-0)	
DNEL/DMEL (Workers)	
Acute - systemic effects, inhalation	958 mg/m ³
Long-term - systemic effects, dermal	19 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	130 mg/m ³
DNEL/DMEL (General population)	
Acute - systemic effects, inhalation	340 mg/m ³
Long-term - systemic effects, oral	8 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	28 mg/m ³
Long-term - systemic effects, dermal	8 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0,056 mg/l
PNEC aqua (marine water)	0,006 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0,24 mg/kg dwt
PNEC sediment (marine water)	0,02 mg/kg dwt
PNEC (Soil)	
PNEC soil	0,015 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	452 mg/l

8.2. Exposure controls

Personal protective equipment:

Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection.

Hand protection:

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Wear suitable gloves resistant to chemical penetration. Wear rubber gloves (0.75mm). The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN 374. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu)

Eye protection:

Chemical goggles or safety glasses (acc. EN 166)

Skin and body protection:

If skin contact or contamination of clothing is possible, protective clothing should be worn

Respiratory protection:

Do not inhale vapour. Supplied air respirator if working in a confined area



Other information:

Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: Yellow.
Odour	: Solvent.
Odour threshold	: No data available
pH	: Not applicable
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: -68 °C
Freezing point	: No data available
Boiling point	: 176 - 204 °C
Flash point	: 67,7 °C
Auto-ignition temperature	: 169 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: 2,67 kPa
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 0,976 Relative density, liquid (water=1)
Solubility	: No data available
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 2 - 33 vol %

9.2. Other information

VOC content	: > 20 %
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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Reacts with : Strong alkalis. Strong acids.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

10.4. Conditions to avoid

Ignition sources. Extremely high or low temperatures. Direct sunlight. Sparks. Moisture.

10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

None under normal use. At high temperature may liberate dangerous gases. fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified

Acute toxicity (dermal) : Not classified

Acute toxicity (inhalation) : Not classified

γ-butyrolactone (96-48-0)	
LD50 oral rat	1582 mg/kg
LC50 inhalation rat (mg/l)	5,1 mg/l/4h

Skin corrosion/irritation : Not classified

pH: Not applicable

Additional information : Based on available data, the classification criteria are not met

Serious eye damage/irritation : Causes serious eye damage.

pH: Not applicable

Respiratory or skin sensitisation : Not classified

Additional information : Based on available data, the classification criteria are not met

Germ cell mutagenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Carcinogenicity : Not classified

Additional information : Based on available data, the classification criteria are not met

Reproductive toxicity : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-single exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

STOT-repeated exposure : Not classified

Additional information : Based on available data, the classification criteria are not met

γ-butyrolactone (96-48-0)	
NOAEL (oral, rat, 90 days)	225 - 450 mg/kg bodyweight/day

Aspiration hazard : Not classified

Additional information : Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms : Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

12.1. Toxicity

Acute aquatic toxicity : Not classified

Chronic aquatic toxicity : Not classified

γ-butyrolactone (96-48-0)	
LC50 fish 1	> 100 mg/l 24h
EC50 Daphnia 1	> 500 mg/l
EC50 72h algae (1)	1000 mg/l
LOEC (acute)	< 7,81 mg/l 72h
NOEC (acute)	> 18 mg/l 96h

12.2. Persistence and degradability

SS21 INK YELLOW	
Persistence and degradability	Not established.

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

12.3. Bioaccumulative potential

SS21 INK YELLOW	
Bioaccumulative potential	Not established.
γ-butyrolactone (96-48-0)	
Log Pow	-0,566 @ 25 °C and pH 6 - 8

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Additional information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations : Avoid release to the environment. Dispose of this material and its container at hazardous or special waste collection point. Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials : Avoid release to the environment.

European List of Waste (LoW) code : 08 03 12* - waste ink containing dangerous substances

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment : No	Dangerous for the environment : No Marine pollutant : No	Dangerous for the environment : No	Dangerous for the environment : No	Dangerous for the environment : No
No supplementary information available				

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

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

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

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3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	γ-butyrolactone
3(b) Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	SS21 INK YELLOW - γ-butyrolactone

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

VOC content : > 20 %

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes:

Section	Changed item	Change	Comments
	Supersedes	Modified	
	Revision date	Modified	
2.2	Precautionary statements (CLP)	Modified	

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.

Other information : None.

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3, Narcosis
H302	Harmful if swallowed.
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness.
PC18	Ink and Toners
PROC1	Use in closed process, no likelihood of exposure
SU22	Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

SDS EU (REACH Annex II)

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