

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 15-6-2012 Revision date: 9-5-2023 Supersedes version of: 3-9-2019 Version: 4.2

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

#### 1.1. Product identifier

Product form : Mixture

Product name : CS100 INK CYAN

UFI : YAXV-2AU3-X40G-NWPY

Product code : CS100-C-BB
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
CS100 INK CYAN	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

#### 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	+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]

Serious eye damage/eye irritation, Category 1 H318 Specific target organ toxicity – Single exposure, Category 3, Narcosis H336

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

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

No additional information available

9-5-2023 (Revision date) EN (English) 1/16

# Safety Data Sheet

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

# 2.2. Label elements

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

Hazard pictograms (CLP)



: Danger

Signal word (CLP)

Contains y-Butyrolactone; 2-methoxy-1-methylethyl acetate

Hazard statements (CLP) : H318 - Causes serious eye damage.

H336 - May cause drowsiness or dizziness.

Precautionary statements (CLP) : P261 - Avoid breathing vapours, mist.

P280 - Wear eye protection, face protection.

P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a

POISON CENTER or doctor.

P312 - Call a POISON CENTRE or doctor if you feel unwell.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P501 - Dispose of contents and container to hazardous or special waste collection point, in

accordance with local, regional, national and/or international regulation.

#### 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]
2-butoxyethyl acetate; butylglycol acetate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	CAS-No.: 112-07-2 EC-No.: 203-933-3 EC Index-No.: 607-038-00-2 REACH-no: 01-2119475112- 47	≥ 50	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312
γ-Butyrolactone	CAS-No.: 96-48-0 EC-No.: 202-509-5 REACH-no: 01-2119471839- 21	10 – 30	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 STOT SE 3, H336
2-methoxy-1-methylethyl acetate substance with national workplace exposure limit(s) (GB); substance with a Community workplace exposure limit	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 STOT SE 3, H336

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

## Safety Data Sheet

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

#### **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 : Remove person to fresh air and keep comfortable for breathing. Call a POISON

CENTER/doctor if you feel unwell.

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. If irritation persists, consult a doctor.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

First-aid measures after ingestion : Rinse mouth. Give water to drink. Do NOT induce vomiting. Seek medical attention if ill

effect develops.

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

Symptoms/effects after inhalation : May cause drowsiness or dizziness. Symptoms/effects after eye contact : Causes serious eye damage.

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

No additional information available

# **SECTION 5: Firefighting measures**

#### 5.1. Extinguishing media

Suitable extinguishing media : Alcohol resistant foam. Water spray. Dry powder. Carbon dioxide.

Unsuitable extinguishing media : Heavy water stream.

# 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Oxidizing agent.

#### 5.3. Advice for firefighters

Precautionary measures fire : Eliminate ignition sources.

Firefighting instructions : Keep upwind. 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.

Other information : Combustible.

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

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

General measures : Remove ignition sources. Provide adequate ventilation.

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. Avoid breathing vapours, mist.

Emergency procedures : Keep public away from danger area. Ventilate area.

#### 6.2. Environmental precautions

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

9-5-2023 (Revision date) EN (English) 3/16

## Safety Data Sheet

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

#### 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. Do not use
 Sawdust. Sweep or shovel spills into appropriate container for disposal. Store away from other materials.

#### 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. Use grounded electrical/mechanical equipment. Containers must be properly grounded before beginning transfer. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Avoid breathing vapours, mist.

Hygiene measures

: If skin contact or contamination of clothing is possible, protective clothing should be worn. Face shield. 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

Storage conditions

: Keep cool. Store in a dry place. Keep only in the original container in a cool well ventilated

place. Keep container tightly closed.Strong bases. Strong acids.

Incompatible products
Incompatible materials
Information on mixed storage

: Sources of ignition. Direct sunlight.: Oxidation agents. Strong alkalis.

#### 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

2-butoxyethyl acetate; butylglycol acetate (112-07-2)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	2-Butoxyethyl acetate	
IOEL TWA	133 mg/m³	
IOEL TWA [ppm]	20 ppm	
IOEL STEL	333 mg/m³	
IOEL STEL [ppm]	50 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
Local name	2-Butoxyethyl acetate	
WEL TWA (OEL TWA) [1]	133 mg/m³	
WEL TWA (OEL TWA) [2]	20 ppm	
WEL STEL (OEL STEL)	332 mg/m³	
WEL STEL (OEL STEL) [ppm]	50 ppm	

# Safety Data Sheet

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

2-butoxyethyl acetate; butylglycol acetate (112-07-2)		
Remark	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)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	
2-methoxy-1-methylethyl acetate (108-65-6)		
EU - Indicative Occupational Exposure Limit (IOEL)		
Local name	2-Methoxy-1-methylethylacetate	
IOEL TWA	275 mg/m³	
IOEL TWA [ppm]	50 ppm	
IOEL STEL	550 mg/m³	
IOEL STEL [ppm]	100 ppm	
Remark	Skin	
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC COMMISSION DIRECTIVE 2000/39/EC	
United Kingdom - Occupational Exposure Limits		
Local name	1-Methoxypropyl acetate	
WEL TWA (OEL TWA) [1]	274 mg/m³	
WEL TWA (OEL TWA) [2]	50 ppm	
WEL STEL (OEL STEL)	548 mg/m³	
WEL STEL (OEL STEL) [ppm]	100 ppm	
Remark	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)	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

#### 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

2-butoxyethyl acetate; butylglycol acetate (112-07-2)		
DNEL/DMEL (Workers)		
Acute - systemic effects, dermal	120 mg/kg bodyweight/day	
Acute - local effects, inhalation	333 mg/m³	
Long-term - systemic effects, dermal	169 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	133 mg/m³	
DNEL/DMEL (General population)		
Acute - systemic effects, dermal	72 mg/kg bodyweight/day	
Acute - systemic effects, oral	36 mg/kg bodyweight/day	
Acute - local effects, inhalation	200 mg/m³	
Long-term - systemic effects,oral	8,6 mg/kg bodyweight/day	
Long-term - systemic effects, inhalation	80 mg/m³	
Long-term - systemic effects, dermal	102 mg/kg bodyweight/day	

# Safety Data Sheet

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

2-butoxyethyl acetate; butylglycol acetate (112-07-2)			
PNEC (Water)			
PNEC aqua (freshwater)	0,304 mg/l		
PNEC aqua (marine water)	0,0304 mg/l		
PNEC aqua (intermittent, freshwater)	0,56 mg/l		
PNEC (Sediment)			
PNEC sediment (freshwater)	2,03 mg/kg dwt		
PNEC sediment (marine water)	0,203 mg/kg dwt		
PNEC (Soil)			
PNEC soil	0,415 mg/kg dwt		
PNEC (Oral)			
PNEC oral (secondary poisoning)	60 mg/kg food		
PNEC (STP)			
PNEC sewage treatment plant	90 mg/l		
γ-Butyrolactone (96-48-0)			
DNEL/DMEL (Workers)			
Acute - systemic effects, inhalation	958 mg/m³		
Long-term - systemic effects, dermal	19 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	130 mg/m³		
PNEC (Water)			
PNEC aqua (freshwater)	0,056 mg/l		
PNEC aqua (marine water)	0,0056 mg/l		
PNEC aqua (intermittent, freshwater)	0,56 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	0,014683 mg/kg dwt		
PNEC (STP)			
PNEC sewage treatment plant	452 mg/l		
2-methoxy-1-methylethyl acetate (108-65-6)	2-methoxy-1-methylethyl acetate (108-65-6)		
DNEL/DMEL (Workers)			
Acute - local effects, inhalation	550 mg/m³		
Long-term - systemic effects, dermal	796 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	275 mg/m³		
DNEL/DMEL (General population)			
Acute - systemic effects, oral	500 mg/kg bodyweight/day		
Long-term - systemic effects,oral	36 mg/kg bodyweight/day		
Long-term - systemic effects, inhalation	33 mg/m³		

## Safety Data Sheet

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

2-methoxy-1-methylethyl acetate (108-65-6)		
Long-term - systemic effects, dermal	320 mg/kg bodyweight/day	
Long-term - local effects, inhalation	33 mg/m³	
PNEC (Water)		
PNEC aqua (freshwater)	0,635 mg/l	
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	

#### 8.1.5. Control banding

No additional information available

#### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

#### Appropriate engineering controls:

Ensure that there is a suitable ventilation system.

#### 8.2.2. Personal protection equipment

#### Personal protective equipment:

Avoid all unnecessary exposure. Safety glasses. Face shield. Gloves. Wear respiratory protection.

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









#### 8.2.2.1. Eye and face protection

#### Eye protection:

Chemical goggles or safety glasses (acc. EN 166)

#### 8.2.2.2. Skin protection

#### Skin and body protection:

Where contact with eyes or skin is likely, wear suitable protection. Standard. EN 13034

# Hand protection:

Wear suitable gloves resistant to chemical penetration. Protective gloves made of PVA. Breakthrough time (EN 374-3:2003): > 480 min (www.echa.europa.eu). Layer thickness: No data available. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer

#### 8.2.2.3. Respiratory protection

## Respiratory protection:

Do not inhale vapour. Supplied air respirator if working in a confined area. Approved organic vapour respirator. Type A - High-boiling (>65 °C) organic compounds

#### 8.2.2.4. Thermal hazards

No additional information available

## Safety Data Sheet

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

#### 8.2.3. Environmental exposure controls

#### 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 Solvent. Odour threshold : Not available < -30 °C Melting point Freezing point Not available Boiling point 145 - 209 °C Flammability Non flammable. Explosive limits Not available Lower explosion limit : Not available : Not available Upper explosion limit : 66 °C Flash point Auto-ignition temperature : Not available Decomposition temperature : Not available : Not available рΗ Viscosity, kinematic : 4.02 mm<sup>2</sup>/s Viscosity, dynamic : 4 mPa·s Solubility : Dispersible. Partition coefficient n-octanol/water (Log Kow) : Not available : 0,493 kPa (20°) Vapour pressure Vapour pressure at 50°C : Not available Density : 0,995 (25°C) Relative density : Not available Relative vapour density at 20°C : Not available

#### 9.2. Other information

Particle characteristics

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

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : 92 %

# **SECTION 10: Stability and reactivity**

## 10.1. Reactivity

Stable under normal conditions.

#### 10.2. Chemical stability

Not established.

## 10.3. Possibility of hazardous reactions

Not established.

#### 10.4. Conditions to avoid

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

: Not applicable

## 10.5. Incompatible materials

Strong acids. Strong bases.

# Safety Data Sheet

Reproductive toxicity
Additional information

STOT-single exposure

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

# 10.6. Hazardous decomposition products

Carbon monoxide. Toxic gases. fume. Carbon dioxide.

# **SECTION 11: Toxicological information**

44.4	The Committee of Committee of	and the second of		and a fitting and the	District a Con-	(EO) NI-	4070/0000
11.1	. Information of	on nazaro	classes as	defined in	Requiation	(EC) NO	1 <i>21212</i> 008

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

Acute toxicity (inhalation)	: Not classified
2-butoxyethyl acetate; butylglycol acetate	(112-07-2)
LD50 oral rat	≈ 1880 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Remarks on results: other:
LD50 dermal rabbit	≈ 1500 mg/kg bodyweight Animal: rabbit, Remarks on results: other:
LC50 Inhalation - Rat	3,91 mg/l ( 8 h)
γ-Butyrolactone (96-48-0)	
LD50 oral rat	1582 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LC50 Inhalation - Rat	> 5,1 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
Soybean oil, expoxidized (8013-07-8)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
29H,31H-phthalocyaninato(2-)-N29,N30,N3	1,N32 copper (147-14-8)
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 5000 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
2-methoxy-1-methylethyl acetate (108-65-6	5)
LD50 oral rat	6190 mg/kg
LD50 dermal rat	> 2000 mg/kg bw/day
Skin corrosion/irritation	: Not classified
Additional information	: Based on available data, the classification criteria are not met
Serious eye damage/irritation	: Causes serious eye damage.
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
γ-Butyrolactone (96-48-0)	
NOAEL (chronic, oral, animal/male, 2 years)	225 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: other:NTP Protocol, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	450 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: other:NTP Protocol, Remarks on results: other:Effect type: carcinogenicity (migrated information)

: May cause drowsiness or dizziness.

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

: Not classified

# Safety Data Sheet

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

STOT-single exposure	May cause drowsiness or dizziness.	
	<u> </u>	
2-methoxy-1-methylethyl acetate (108-65	-6)	
STOT-single exposure	May cause drowsiness or dizziness.	
STOT-repeated exposure Additional information	<ul><li>Not classified</li><li>Based on available data, the classification criteria are not met</li></ul>	
2-butoxyethyl acetate; butylglycol acetat	re (112-07-2)	
NOAEL (dermal, rat/rabbit, 90 days)	> 150 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 411 (Subchronic Dermal Toxicity: 90-Day Study)	
NOAEC (inhalation, rat, vapour, 90 days)	31 – 62,5 ppm	
γ-Butyrolactone (96-48-0)		
NOAEL (oral, rat, 90 days)	225 – 450 mg/kg bodyweight/day	
Soybean oil, expoxidized (8013-07-8)		
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)	
29H,31H-phthalocyaninato(2-)-N29,N30,N	l31,N32 copper (147-14-8)	
NOAEL (oral, rat, 90 days)	1000 mg/kg bodyweight Animal: rat, Guideline: other:Guideline for 28-Day Repeated Dose Toxicity Test in Mammalian Species (Chemical Substances Control Law of Japan)	
2-methoxy-1-methylethyl acetate (108-65	-6)	
LOAEL (oral, rat, 90 days)	2757 mg/kg bodyweight/day	
LOAEL (dermal, rat/rabbit, 90 days)	3676 mg/kg bodyweight/day	
NOAEL (oral, rat, 90 days)	919 mg/kg bodyweight/day	
NOAEL (dermal, rat/rabbit, 90 days)	1000 – 1838 mg/kg bodyweight/day	
NOAEC (inhalation, rat, vapour, 90 days)	1000 ppm	
Aspiration hazard Additional information	Not classified     Based on available data, the classification criteria are not met	
CS100 INK CYAN		
Viscosity, kinematic	4,02 mm²/s	
2-butoxyethyl acetate; butylglycol acetate (112-07-2)		
Viscosity, kinematic	1,303 – 3,063 mm²/s	
γ-Butyrolactone (96-48-0)		
Viscosity, kinematic	1,77 mm²/s	
2-methoxy-1-methylethyl acetate (108-65	-6)	
Viscosity, kinematic	1,23 mm²/s @ 20°C	

# 11.2. Information on other hazards

# 11.2.1. Endocrine disrupting properties

No additional information available

# 11.2.2. Other information

Potential adverse human health effects and symptoms

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

9-5-2023 (Revision date) EN (English) 10/16

# Safety Data Sheet

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

# **SECTION 12: Ecological information**

# 12.1. Toxicity

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

(acute)

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

(chronic)

(Chronic)	
2-butoxyethyl acetate; butylglycol aceta	ate (112-07-2)
LC50 - Fish [1]	20 – 40 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	37 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1570 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	520 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
γ-Butyrolactone (96-48-0)	
LC50 - Fish [1]	56 mg/l Test organisms (species): Lepomis macrochirus
EC50 - Crustacea [1]	> 500 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (acute)	< 7,81 mg/l 72h
NOEC (acute)	> 18 mg/l 96h
29H,31H-phthalocyaninato(2-)-N29,N30	N31,N32 copper (147-14-8)
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
LC50 - Fish [2]	355,6 mg/l Test organisms (species): other:Oncorhynchus mykiss (formerly named: Salmo gairdneri)
EC50 - Crustacea [1]	> 500 mg/l Test organisms (species): other:Daphnia magna Straus
EC50 - Crustacea [2]	> 500 mg/l Test organisms (species): Daphnia magna
EC50 - Other aquatic organisms [1]	> 500 mg/l Test organisms (species): other:
EC50 72h - Algae [1]	> 100 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	> 1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	≥ 1 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
2-methoxy-1-methylethyl acetate (108-6	55-6)
LC50 - Fish [1]	130 mg/l
EC50 - Crustacea [1]	408 mg/l
EC50 72h - Algae [1]	> 1000 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 96h - Algae [1]	1000 mg/l
LOEC (acute)	> 1000 mg/l 96h
NOEC (acute)	≥ 1000 mg/l 96h
NOEC (chronic)	47,5 mg/l (14 d)
NOEC chronic fish	47,5 mg/l
NOEC chronic crustacea	100 mg/l ( 21 d)

## Safety Data Sheet

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

2-methoxy-1-methylethyl acetate (108-65-6)	
NOEC chronic algae	1 g/l ( 4 d)

# 12.2. Persistence and degradability

CS100 INK CYAN	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

CS100 INK CYAN		
Bioaccumulative potential Not established.		
2-butoxyethyl acetate; butylglycol acetate (112-07-2)		
Partition coefficient n-octanol/water (Log Pow) 1,51 @ 25°C and pH 7		
γ-Butyrolactone (96-48-0)		
Bioconcentration factor (BCF REACH)	3,16	
Partition coefficient n-octanol/water (Log Pow) -0,566 @ 25 °C and pH 6 - 8		
2-methoxy-1-methylethyl acetate (108-65-6)		
Partition coefficient n-octanol/water (Log Pow) 1,2 @ 20 °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. Endocrine disrupting properties

No additional information available

#### 12.7. Other adverse effects

Additional information : Avoid release to the environment.

# **SECTION 13: Disposal considerations**

#### 13.1. Waste treatment methods

European List of Waste (LoW) code

Regional legislation (waste)

Ecology - waste materials

HP Code

Product/Packaging disposal recommendations

: Disposal must be done according to official regulations.

: Prevent entry to sewers and public waters. 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.

: Avoid release to the environment.

: 08 03 12\* - waste ink containing dangerous substances

: HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

HP4 - "Irritant – skin irritation and eye damage:" waste which on application can cause skin irritation or damage to the eye.

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

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

9-5-2023 (Revision date) EN (English) 12/16

# Safety Data Sheet

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	14.1. UN number or ID number			
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shippin	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

#### 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

# **REACH Annex XVII (Restriction List)**

EU restriction list (REACH Annex XVII)		
Reference code	Applicable on	Entry title or description
3(a)	2-methoxy-1-methylethyl acetate	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

#### **REACH Annex XIV (Authorisation List)**

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

### **REACH Candidate List (SVHC)**

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

## Safety Data Sheet

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

#### **PIC Regulation (Prior Informed Consent)**

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

#### **POP Regulation (Persistent Organic Pollutants)**

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

#### Ozone Regulation (1005/2009)

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

#### VOC Directive (2004/42)

VOC content : 92 %

#### **Explosives Precursors Regulation (2019/1148)**

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

#### **Drug Precursors Regulation (273/2004)**

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

#### 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	
8.2	Personal protective equipment	Modified	
13.1	H code	Added	

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	
IARC	International Agency for Research on Cancer	
EC50	Median effective concentration	
IATA	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	

# Safety Data Sheet

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

Abbreviations and acronyms:			
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		

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 (Dermal)	Acute toxicity (dermal), Category 4	
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4	
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	
H226	Flammable liquid and vapour.	
H302	Harmful if swallowed.	
H312	Harmful in contact with skin.	
H318	Causes serious eye damage.	
H332	Harmful if inhaled.	
H336	May cause drowsiness or dizziness.	
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis	

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		

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:		
Eye Dam. 1	H318	Calculation method
STOT SE 3	H336	Calculation method

# Safety Data Sheet

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

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.