

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

#### 1.1. Product identifier

Product form : Mixture  
Product name : CS100 INK BLACK  
UFI : AVMS-FC2V-T40A-HPY4  
Product code : CS100-K-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 BLACK	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](mailto: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

# CS100 INK BLACK

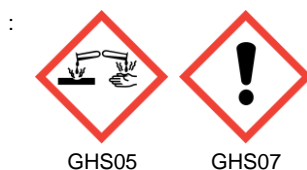
## Safety Data Sheet

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)



Signal word (CLP)

Contains

Hazard statements (CLP)

Precautionary statements (CLP)

- : Danger
- :  $\gamma$ -Butyrolactone; 2-methoxy-1-methylethyl acetate
- : H318 - Causes serious eye damage.  
H336 - May cause drowsiness or dizziness.
- : 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  $\geq 0.1\%$  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	$\geq 50$	Acute Tox. 4 (Inhalation), H332 Acute Tox. 4 (Dermal), H312
$\gamma$ -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
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	1 – 5	Not classified

# CS100 INK BLACK

## Safety Data Sheet

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

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

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

First-aid measures 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.
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#### 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.
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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. 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.

# CS100 INK BLACK

## 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.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Information on mixed storage : 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/m <sup>3</sup>
IOEL TWA [ppm]	20 ppm
IOEL STEL	333 mg/m <sup>3</sup>
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/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	20 ppm
WEL STEL (OEL STEL)	332 mg/m <sup>3</sup>
WEL STEL (OEL STEL) [ppm]	50 ppm

# CS100 INK BLACK

## Safety Data Sheet

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

<b>2-butoxyethyl acetate; butylglycol acetate (112-07-2)</b>	
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
<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
Local name	2-Methoxy-1-methylethylacetate
IOEL TWA	275 mg/m <sup>3</sup>
IOEL TWA [ppm]	50 ppm
IOEL STEL	550 mg/m <sup>3</sup>
IOEL STEL [ppm]	100 ppm
Remark	Skin
Regulatory reference	COMMISSION DIRECTIVE 2000/39/EC COMMISSION DIRECTIVE 2000/39/EC
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	1-Methoxypropyl acetate
WEL TWA (OEL TWA) [1]	274 mg/m <sup>3</sup>
WEL TWA (OEL TWA) [2]	50 ppm
WEL STEL (OEL STEL)	548 mg/m <sup>3</sup>
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
<b>Carbon black (1333-86-4)</b>	
<b>United Kingdom - Occupational Exposure Limits</b>	
Local name	Carbon black
WEL TWA (OEL TWA) [1]	3,5 mg/m <sup>3</sup>
WEL STEL (OEL STEL)	7 mg/m <sup>3</sup>
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

<b>2-butoxyethyl acetate; butylglycol acetate (112-07-2)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - systemic effects, dermal	120 mg/kg bodyweight/day
Acute - local effects, inhalation	333 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	169 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	133 mg/m <sup>3</sup>

# CS100 INK BLACK

## Safety Data Sheet

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

<b>2-butoxyethyl acetate; butylglycol acetate (112-07-2)</b>	
<b>DNEL/DMEL (General population)</b>	
Acute - systemic effects, dermal	72 mg/kg bodyweight/day
Acute - systemic effects, oral	36 mg/kg bodyweight/day
Acute - local effects, inhalation	200 mg/m <sup>3</sup>
Long-term - systemic effects, oral	8,6 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	80 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	102 mg/kg bodyweight/day
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0,304 mg/l
PNEC aqua (marine water)	0,0304 mg/l
PNEC aqua (intermittent, freshwater)	0,56 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	2,03 mg/kg dwt
PNEC sediment (marine water)	0,203 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0,415 mg/kg dwt
<b>PNEC (Oral)</b>	
PNEC oral (secondary poisoning)	60 mg/kg food
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	90 mg/l
<b>γ-Butyrolactone (96-48-0)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - systemic effects, inhalation	958 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	19 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	130 mg/m <sup>3</sup>
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0,056 mg/l
PNEC aqua (marine water)	0,0056 mg/l
PNEC aqua (intermittent, freshwater)	0,56 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	0,24 mg/kg dwt
PNEC sediment (marine water)	0,02 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0,014683 mg/kg dwt
<b>PNEC (STP)</b>	
PNEC sewage treatment plant	452 mg/l

# CS100 INK BLACK

## Safety Data Sheet

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

<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
<b>DNEL/DMEL (Workers)</b>	
Acute - local effects, inhalation	550 mg/m <sup>3</sup>
Long-term - systemic effects, dermal	796 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	275 mg/m <sup>3</sup>
<b>DNEL/DMEL (General population)</b>	
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/m <sup>3</sup>
Long-term - systemic effects, dermal	320 mg/kg bodyweight/day
Long-term - local effects, inhalation	33 mg/m <sup>3</sup>
<b>PNEC (Water)</b>	
PNEC aqua (freshwater)	0,635 mg/l
PNEC aqua (marine water)	0,0635 mg/l
PNEC aqua (intermittent, freshwater)	6,35 mg/l
<b>PNEC (Sediment)</b>	
PNEC sediment (freshwater)	3,29 mg/kg dwt
PNEC sediment (marine water)	0,329 mg/kg dwt
<b>PNEC (Soil)</b>	
PNEC soil	0,29 mg/kg dwt
<b>PNEC (STP)</b>	
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

# CS100 INK BLACK

## Safety Data Sheet

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

### 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

### 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	: Black.
Odour	: Solvent.
Odour threshold	: Not available
Melting point	: < -30 °C
Freezing point	: Not available
Boiling point	: 145 – 209 °C
Flammability	: Non flammable.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 65 °C
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
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
Vapour pressure	: 0,493 kPa (20°)
Vapour pressure at 50°C	: Not available
Density	: 0,995 (25°C)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

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

No additional information available

#### 9.2.2. Other safety characteristics

VOC content : 91 %

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions.



# CS100 INK BLACK

## Safety Data Sheet

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

### 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.

### 10.5. Incompatible materials

Strong acids. Strong bases.

### 10.6. Hazardous decomposition products

Carbon monoxide. Toxic gases. fume. Carbon dioxide.

## SECTION 11: Toxicological information

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

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

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

LD50 oral rat	6190 mg/kg
LD50 dermal rat	> 2000 mg/kg bw/day

#### Carbon black (1333-86-4)

LD50 oral rat	> 8000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:, Guideline: other:, Guideline: other:, Guideline: other:
LC50 Inhalation - Rat	> 4,6 mg/m <sup>3</sup>

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

# CS100 INK BLACK

## Safety Data Sheet

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

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

<b>γ-Butyrolactone (96-48-0)</b>	
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)

Reproductive toxicity : Not classified  
Additional information : Based on available data, the classification criteria are not met  
STOT-single exposure : May cause drowsiness or dizziness.

<b>γ-Butyrolactone (96-48-0)</b>	
STOT-single exposure	May cause drowsiness or dizziness.

<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified  
Additional information : Based on available data, the classification criteria are not met

<b>2-butoxyethyl acetate; butylglycol acetate (112-07-2)</b>	
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

<b>γ-Butyrolactone (96-48-0)</b>	
NOAEL (oral, rat, 90 days)	225 – 450 mg/kg bodyweight/day

<b>Soybean oil, expoxidized (8013-07-8)</b>	
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)

<b>2-methoxy-1-methylethyl acetate (108-65-6)</b>	
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

<b>Carbon black (1333-86-4)</b>	
LOAEC (inhalation, rat,dust/mist/fume, 90 days)	0,0071 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)
NOAEL (oral, rat, 90 days)	> 1000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	0,0011 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day Study)

Aspiration hazard : Not classified  
Additional information : Based on available data, the classification criteria are not met

<b>CS100 INK BLACK</b>	
Viscosity, kinematic	4,02 mm <sup>2</sup> /s

# CS100 INK BLACK

## 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)	
Viscosity, kinematic	1,303 – 3,063 mm <sup>2</sup> /s
γ-Butyrolactone (96-48-0)	
Viscosity, kinematic	1,77 mm <sup>2</sup> /s
2-methoxy-1-methylethyl acetate (108-65-6)	
Viscosity, kinematic	1,23 mm <sup>2</sup> /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

## SECTION 12: Ecological information

### 12.1. Toxicity

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

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

2-butoxyethyl acetate; butylglycol acetate (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
2-methoxy-1-methylethyl acetate (108-65-6)	
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

# CS100 INK BLACK

## 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)	47,5 mg/l (14 d)
NOEC chronic fish	47,5 mg/l
NOEC chronic crustacea	100 mg/l ( 21 d)
NOEC chronic algae	1 g/l ( 4 d)

### Carbon black (1333-86-4)

EC50 - Crustacea [1]	> 1000 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 10000 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	> 10000 mg/l Test organisms (species):

## 12.2. Persistence and degradability

### CS100 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

### CS100 INK BLACK

Bioaccumulative potential	Not established.
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### 2-butoxyethyl acetate; butylglycol acetate (112-07-2)

Partition coefficient n-octanol/water (Log Pow)	1,51 @ 25°C and pH 7
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### 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
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### Carbon black (1333-86-4)

Bioaccumulative potential	Not established.
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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. Endocrine disrupting properties

No additional information available

## 12.7. Other adverse effects

Additional information : Avoid release to the environment.

# CS100 INK BLACK

## Safety Data Sheet

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

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: 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.
Ecology - waste materials	: Avoid release to the environment.
European List of Waste (LoW) code	: 08 03 12* - waste ink containing dangerous substances
HP Code	: 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

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
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

# CS100 INK BLACK

## Safety Data Sheet

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

### 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
3(b)	CS100 INK BLACK ; 2-butoxyethyl acetate; butylglycol acetate ; $\gamma$ -Butyrolactone ; 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 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

###### 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

###### 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 : 91 %

###### 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	

# CS100 INK BLACK

## Safety Data Sheet

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

Indication of changes			
Section	Changed item	Change	Comments
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
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

# CS100 INK BLACK

## Safety Data Sheet

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

### Full text of H- and EUH-statements:

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

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.