



A CANON COMPANY

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture Ink Tank Cyan TCS500

Other means of identification

Article Number 29953719,29953723,1060019426

Registration number -

Synonyms None.

Product code 7518B001AA,7518B005AA,7518B011AA

Issue date 12-July-2019

Version number 1.2

Revision date 06-February-2020

Supersedes date 04-November-2019

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

Identified uses Inkjet printing ink.

Uses advised against Other uses not recommended.

1.3. Details of the supplier of the safety data sheet

Supplier Canon Production Printing Netherlands B.V.

Address Van der Grintenstraat 10

City 5914 HH Venlo

Country The Netherlands

Telephone Number +31 77 359 2222

E-mail address sds-hq@cpp.canon

1.4. Emergency telephone number

National Poison Information Center 111 (Available 24 hours a day.)

NCEC Service +44 (0) 1235 239 670 For chemical emergencies only. (Available 24 hours a day.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Health hazards

Reproductive toxicity Category 1B H360 - May damage fertility or the unborn child.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: 2-pyrrolidone

Hazard pictograms



Signal word Danger

Hazard statements

H360 May damage fertility or the unborn child.

Precautionary statements

Prevention

P280 Wear protective gloves.

Response

P308 + P313

IF exposed or concerned: Get medical advice/attention.

Storage

Not available.

Disposal

Not available.

Supplemental label information EUH208 - Contains 1,2-Benzisothiazol-3(2H)-one. May produce an allergic reaction.**2.3. Other hazards** Not a PBT or vPvB substance or mixture.**SECTION 3: Composition/information on ingredients****3.2. Mixtures****General information**

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
water	60 - < 90	7732-18-5 231-791-2	-	-	
Classification:	-				
2-pyrrolidone	5 - <10	616-45-5 210-483-1	-	-	
Classification:	Eye Irrit. 2;H319, Repr. 1B;H360				
1,2-Hexanediol	1 - < 5	6920-22-5 230-029-6	-	-	
Classification:	Eye Irrit. 2;H319				
1,2-Benzisothiazol-3(2H)-one	<0.05	2634-33-5 220-120-9	-	613-088-00-6	
Classification:	Acute Tox. 4;H302, Skin Irrit. 2;H315, Skin Sens. 1;H317, Eye Dam. 1;H318, Acute Tox. 2;H330, Aquatic Acute 1;H400, Aquatic Chronic 2;H411				

List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

M: M-factor

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

SECTION 4: First aid measures**General information**

IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

4.1. Description of first aid measures**Inhalation**

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

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

Exposure may cause temporary irritation, redness, or discomfort.

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

Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

SECTION 5: Firefighting measures**General fire hazards**

No unusual fire or explosion hazards noted.

5.1. Extinguishing media**Suitable extinguishing media**Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).**Unsuitable extinguishing media**

Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters**Special protective equipment for firefighters**

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special fire fighting procedures

Move containers from fire area if you can do so without risk.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

For non-emergency personnel	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

6.2. Environmental precautions Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Should be handled in closed systems, if possible. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
7.2. Conditions for safe storage, including any incompatibilities	Store locked up. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).
7.3. Specific end use(s)	Professional and Industrial

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Recommended monitoring procedures	Follow standard monitoring procedures.
Derived no effect levels (DNELs)	Not available.
Predicted no effect concentrations (PNECs)	Not available.

8.2. Exposure controls

Appropriate engineering controls Provide adequate ventilation. See operator manual or safety data sheet of the printer.

Individual protection measures, such as personal protective equipment

General information	Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.
Eye/face protection	If contact is likely, safety glasses with side shields are recommended. Not required during normal intended use of this product.
Skin protection	
- Hand protection	Wear appropriate chemical resistant gloves. Glove material: Nitrile.. Use gloves with breakthrough time of 30 minutes. Minimum glove thickness 0.1 mm.
- Other	Not required during normal intended use of this product.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Not required during normal intended use of this product.
Thermal hazards	Not normally needed.

Hygiene measures Observe any medical surveillance requirements. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Contain spills and prevent releases and observe national regulations on emissions.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Colour	Blue
Odour	Very faint.
Odour threshold	Not available.
pH	7 - 8.5
Melting point/freezing point	0 °C (32 °F)
Initial boiling point and boiling range	251.2 °C (484.16 °F) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	0.93 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

9.2. Other information

Density	1.17 g/cm ³ estimated
---------	----------------------------------

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

Information on likely routes of exposure

Inhalation	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin contact	Not classified.
Eye contact	Health injuries are not known or expected under normal use.
Ingestion	However, ingestion is not likely to be a primary route of occupational exposure. Not available.
Symptoms	Exposure may cause temporary irritation, redness, or discomfort.

11.1. Information on toxicological effects

Acute toxicity	Based on available data, the classification criteria are not met.
----------------	---

Components	Species	Test Results
1,2-Benzisothiazol-3(2H)-one (CAS 2634-33-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
1,2-Hexanediol (CAS 6920-22-5)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, Days
Oral		
LD50	Rat	6166 mg/kg
2-pyrrolidone (CAS 616-45-5)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg bw/day OECD 402 > 2000 mg/kg, 24 Hours
Inhalation		
LC0	Rat	0.061 mg/l, 4 hours OECD 403
Oral		
LD50	Rat	> 8000 mg/kg bw/day OECD 401 > 2000 mg/kg
Skin corrosion/irritation	Health injuries are not known or expected under normal use.	
Irritation Corrosion - Skin		
Ink Tank Cyan TCS500		Result: Non-Irritating
1,2-Hexanediol		OECD 404 Result: Not irritating
2-pyrrolidone		OECD 404 Result: Not irritating
1,2-Benzisothiazol-3(2H)-one		Result: irritating
Serious eye damage/eye irritation	Health injuries are not known or expected under normal use. Not classified.	
Eye		
Ink Tank Cyan TCS500		OECD405 Result: Not classified.
1,2-Hexanediol		OECD 405 Result: irritating
2-pyrrolidone		OECD 405 Result: irritating
1,2-Benzisothiazol-3(2H)-one		Result: Serious eye damage
Respiratory sensitisation	Not a respiratory sensitizer.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Sensitisation		
Ink Tank Cyan TCS500		Result: Not sensitising
Skin sensitisation		
1,2-Hexanediol		OECD 429, LLNA Result: Negative
1,2-Benzisothiazol-3(2H)-one		OECD 429, LLNA Result: sensitising Severity: EC3=2,3%
2-pyrrolidone		OECD 429, Read across Result: Not sensitizing
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Germ cell mutagenicity: Ames test		
2-pyrrolidone		OECD 471 Result: Negative
1,2-Hexanediol		OECD 471 Result: Negative.
Germ cell mutagenicity: Chromosome aberration		
2-pyrrolidone		OECD 473 Result: Negative

Germ cell mutagenicity: Chromosome aberration

1,2-Hexanediol

OECD 473

Result: Negative.

Germ cell mutagenicity: Micronucleus

2-pyrrolidone

OECD 474

Result: Negative

Mutagenicity

Ink Tank Cyan TCS500

1,2-Hexanediol

Result: Negative.

OECD 476

Result: Negative.

Carcinogenicity

No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive toxicity

May damage fertility or the unborn child.

Developmental effects

1,2-Hexanediol

300 mg/kg OECD 414

Result: Negative.

2-pyrrolidone

OECD 414

Result: positive

Species: Rabbit

Reproductivity

1,2-Hexanediol

1000 mg/kg

Result: Negative.

Test Duration: 90 day

Specific target organ toxicity - single exposure

Not classified.

Specific target organ toxicity - repeated exposure

Not classified.

1,2-Hexanediol

500 mg/kg OECD 414, Oral

Result: Negative.

700 mg/kg OECD 411

Result: Negative.

Test Duration: 90 day

Aspiration hazard

Not an aspiration hazard.

Mixture versus substance information

No information available.

Other information

May cause allergic respiratory and skin reactions.

SECTION 12: Ecological information**12.1. Toxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components**Species****Test Results**

1,2-Benzisothiazol-3(2H)-one (CAS 2634-33-5)

Aquatic*Acute*

Algae

LC50

Algae

0.11 mg/l, 72 hours

Fish

LC50

Bleak (*Alburnus alburnus*)

0.8 - 0.8 mg/l, 96 hours

Chronic

Algae

EC10

Algae

0.04 mg/l

1,2-Hexanediol (CAS 6920-22-5)

LC50

> 100 mg/l, 72 hours Read across

Aquatic

Crustacea

LC50

Daphnia

> 1000 mg/l, 48 hours

Fish

LC50

Fish

> 1000 mg/l, 96 Hours Read across

2-pyrrolidone (CAS 616-45-5)

Aquatic

Crustacea

EC50

Water flea (*Daphnia pulex*)

13.21 mg/l, 48 hours

Acute

Algae

EC50

Algae

> 500 mg/l, 72 hours

Crustacea

LC50

Daphnia

> 500 mg/l, 48 hours

Fish

LC50

Fish

4600 mg/l, 96 hours

12.2. Persistence and degradability

Biodegradability

Percent Degradation (Aerobic Biodegradation)

1,2-Benzisothiazol-3(2H)-one	Result: Not readily biodegradable
1,2-Hexanediol	OECD 301B
	Result: Readily biodegradable
2-pyrrolidone	OECD 302
	Result: Readily biodegradable

12.3. Bioaccumulative potential

Partition coefficient

n-octanol/water (log Kow)

1,2-Benzisothiazol-3(2H)-one	0.4, Log Kow
2-pyrrolidone	-0.71

Bioconcentration factor (BCF)

2-pyrrolidone	3.16
---------------	------

12.4. Mobility in soil No data available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal. Disposal Considerations: EU waste codes 16 02 13* - discarded equipment containing hazardous components other than those mentioned in 16 02 09 to 16 02 12
EU waste code	
08 03 12*	waste ink containing hazardous substances
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

SECTION 15: Regulatory information

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

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

1,2-Benzisothiazol-3(2H)-one (CAS 2634-33-5)

Other regulations

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

National regulations

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Information on evaluation method leading to the classification of mixture

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available.

Full text of any H-statements not written out in full under Sections 2 to 15

H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H360 May damage fertility or the unborn child.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

Revision information

Product and Company Identification: Alternate Trade Names
SECTION 8: Exposure controls/personal protection: - Hand protection
Physical & Chemical Properties: Multiple Properties
SECTION 11: Toxicological information: Acute toxicity
SECTION 11: Toxicological information: Ingestion
SECTION 11: Toxicological information: Inhalation

Training information

Follow training instructions when handling this material.

Disclaimer

The information in this Safety Data Sheet is based on the present state of knowledge and current legislation and is believed to be accurate. It provides guidance on health, safety and environmental aspects of the product and should neither be construed as any guarantee of specific properties nor of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1. This document was prepared to the requirements of the jurisdiction in Section 1 and may not meet regulatory requirements in other countries or territories. The information contained in this safety data sheet does not replace the user's own assessment of workplace risks, as required by applicable health and safety legislation.