

Safety Data Sheet

From: Noritsu Precision CO., LTD.

579-1, Umehara

Wakayama-shi, 640-8550

Japan

Emergency Telephone: +81 73 456 3969
All Non-Emergency Phone: +81 73 456 3969

Tax: +81 73 456 3991

Ink cartridge Y (H086078-00)

SDS Number: SDS H086078-00-02-OT-E--- Effective Date: 05/31/2019

1. Product Identification

Product Name: Ink cartridge Y

Use: Ink for inkjet printing

2. Hazards Identification

2.1. Classification of the substance or mixture

EC regulation criteria 1272/2008 (CLP)

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Hazard pictograms:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

EUH210 Safety data sheet available on request.

EUH208 Contains S186260. May produce an allergic reaction.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one; 1,2-benzisothiazolin-3-one. May produce an allergic reaction.

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

SDS – Ink cartridge Y (H086078-00-02-OT-E)

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

3. Composition / Information on Ingredients

3.1. Substances

N.A.

3.2. Mixtures

Hazardous components within the meaning of the CLP regulation and related classification:

Qty	Name	Ident. Number	Classification
65%	Water	CAS: 7732-18-5	The product is not classified as
~80%		EC: 231-791-2	dangerous according to
			Regulation EC 1272/2008 (CLP).
7%	Glycerol	CAS: 56-81-5	The product is not classified as
~ 10%		EC: 200-289-5	dangerous according to
			Regulation EC 1272/2008 (CLP).
5%	2-[2-(2-butoxyethoxy)et	Index	3.3/1 Eye Dam. 1 H318
~7%	hoxy]ethanol;	number:603-183-00-0	3.3/1 Eye Dam. 1 H318
	TEGBE; triethylene	CAS: 143-22-6	
	glycol monobutyl ether	EC: 205-592-6	
		REACH No.:	
		01-21194751 07-38	
0.5%	S186260	CAS: P 05-702	<u> </u>
0.3% ~1%	3180200	EC: 470-880-2	3.4.2/1 Skin Sens. 1 H317
170		REACH No.:	
		01-00000197	
		42-67	
0.25%	Triethanol amine	CAS: 102-71-6	The product is not classified as
~0.5%		EC: 203-049-8	dangerous according to
			Regulation EC 1272/2008 (CLP).
< 0.05%	1,2-benzisothiazol-	Index	2 1/4/0 - 1 4 4 11202
	3(2H)-one;	number:613-088-00-6	3.1/4/Oral Acute Tox. 4 H302
	1,2-benzisothiazolin-3-	CAS: 2634-33-5	3.2/2 Skin Irrit. 2 H315
	one	EC: 220-120-9	A
			3.3/1 Eye Dam. 1 H318
			3.4.2/1-1A-1B Skin Sens.
			1,1A,1B H317
			A
			4. 1/A1 Aquatic Acute 1 H400

4. First Aid Measures

4.1. Description of first aid measures

In case of skin contact:

Wash with plenty of water and soap.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL

EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

None

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

Treatment:

None

5. Fire Fighting Measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

6. Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove persons to safety.

See protective measures under point 7 and 8.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

SDS – Ink cartridge Y (H086078-00-02-OT-E)

6.3. Methods and material for containment and cleaning up

Wash with plenty of water.

6.4. Reference to other sections

See also section 8 and 13

7. Handling and Storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

8. Exposure Controls/Personal Protection

8.1. Control parameters

Glycerol - CAS: 56-81-5

- OEL Type: OSHA - LTE: 5 mg/m3 - Notes: PEL, as mist, respirable fraction

- OEL Type: OSHA - LTE: 15 mg/m3 - Notes: PEL, as mist, total dust

DNEL Exposure Limit Values

N.A.

PNEC Exposure Limit Values

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether -

CAS: 143-22-6

Target: Fresh Water - Value: 1.5 mg/l

Target: Freshwater sediments - Value: 5.77 mg/kg

Target: Marine water - Value: 0.15 mg/l

Target: Marine water sediments - Value: 0.13 mg/kg

Target: Microorganisms in sewage treatments - Value: 200 mg/l

8.2. Exposure controls

Eye protection:

Not needed for normal use. Anyway, operate according good working practices.

Protection for skin:

No special precaution must be adopted for normal use.

Protection for hands:

Not needed for normal use.

Respiratory protection:

Not needed for normal use.

Thermal Hazards:

None

SDS – Ink cartridge Y (H086078-00-02-OT-E)

Environmental exposure controls:

None

Appropriate engineering controls:

None

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance and colour:

Odour:

Odourstheed ald:

Yellow Liquid
Slightly

Odour threshold: N.A.

pH: Not Relevant
Melting point / freezing point: -18 °C
Initial boiling point and boiling range: N.A.
Solid/gas flammability: N.A.
Upper/lower flammability or explosive limits: N.A.

Vapour density: N.A.

Flash point: Does not flash until $100 \,^{\circ}\text{C} / 212 \,^{\circ}\text{ F}$

(closed cup method, ASTM D 3278)

Evaporation rate: N.A. Vapour pressure: N.A.

Relative density:

Solubility in water:

Solubility in oil:

Partition coefficient (n-octanol/water):

Auto-ignition temperature:

Decomposition temperature:

N.A.

N.A.

N.A.

N.A.

Viscosity: < 5 mPa·s at 20 °C

Explosive properties: N.A. Oxidizing properties: N.A.

9.2. Other information

Miscibility: N.A.
Fat Solubility: N.A.
Conductivity: N.A.

10. Stability and Reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

SDS – Ink cartridge Y (H086078-00-02-OT-E)

11. Toxicological Information

11.1. Information on toxicological effects

Toxicological information of the mixture:

e) germ cell mutagenicity:

Test: Mutagenesis - Species: Salmonella Typhimurium and Escherichia coli Negative

Toxicological information of the main substances found in the mixture:

Glycerol - CAS: 56-81-5

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 7750 mg/kg - Source: Journal of Industrial Hygiene and Toxicology. Vol. 23, Pg. 259, 1941 Test: LDLo - Route: Oral - Species: Human = 1428 mg/kg - Source: "Toxicology of Drugs and Chemicals," Deichmann, W.B., New York, Academic Press, Inc., 1969Vol. -, Pg. 288, 1969. - Notes: BEHAVIORAL: HEADACHE GASTROINTESTINAL: NAUSEA OR VOMITING

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether - CAS: 143-22-6

a) acute toxicity:

Test: LD50 - Route: Dermal - Species: Rabbit = 3.54 ml/kg - Source: American Industrial Hygiene Association Journal. Vol. 23, Pg. 95, 1962. Test: LD50 - Route: Oral - Species: Rat = 5300 mg/kg - Source: Office of Toxic Substances Report. Vol. OTS,

Triethanol amine - CAS: 102-71-6

a) acute toxicity:

Test: LD50 - Route: Oral - Species: Guinea pig = 2200 mg/kg - Source: "Toxicometric Parameters of Industrial Toxic Chemicals Under Single Exposure," Izmerov, N.F., et al., Moscow, Centre of International Projects, GKNT, 1982Vol. -, Pg. 114, 1982.

Test: LD50 - Route: Oral - Species: Mouse = 5846 mg/kg - Source: Science Reports of the Research Institutes, Tohoku University, Series C: Medicine. Vol. 36(1-4), Pg. 10, 1989. - Notes: GASTROINTESTINAL: "HYPERMOTILITY, DIARRHEA" KIDNEY, URETER, AND BLADDER: OTHER CHANGES BEHAVIORAL: CONVULSIONS OR EFFECT ON SEIZURE THRESHOLD

Substance(s) listed on the IARC Monographs:

Triethanol amine - Group 3.

If not differently specified, the information required in Regulation (EU) 2015/830 listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;

SDS – Ink cartridge Y (H086078-00-02-OT-E)

- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

12. Ecological Information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

N.A.

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

13. Disposal Considerations

13.1. Waste treatment methods

Recover if possible. In so doing, comply with the local and national regulations currently in force.

14. Transport Information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing group

N.A.

14.5. Environmental hazards

N.A

14.6. Special precautions for user

N.A

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

N.A.

SDS – Ink cartridge Y (H086078-00-02-OT-E)

15. Regulatory Information

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

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) 2015/830

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Restrictions related to the product or the substances contained according to Annex

XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product:

No restriction.

Restrictions related to the substances contained:

No restriction.

Where applicable, refer to the following regulatory provisions:

Directive 2003/105/CE ('Activities linked to risks of serious accidents') and subsequent amendments.

Regulation (EC) nr 648/2004 (detergents).

1999/13/EC (VOC directive)

Provisions related to directives 82/501/EC(Seveso), 96/82/EC(Seveso II):

N.A.

USA Information:

TSCA - Toxic Substances Control Act

List of substances included in the TSCA inventory: Water, Glycerol,

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether, Triethanol amine, 1,2-benzisothiazol-3(2H)-one;

1.2-benzisothiazolin-3-one.

List of substances not included in the TSCA inventory: S186260.

TSCA listed substances:

None.

SARA - Superfund Amendments and Reauthorization Act

Section 302 – Extremely Hazardous Substances: no substances listed.

Section 304 – Hazardous substances: no substances listed.

Section 313 – Toxic chemical list: 2-[2-(2-butoxyethoxy)ethoxy]ethanol;

TEGBE; triethylene glycol monobutyl ether.

CAA - Clean Air Act

CAA listed substances:

Glycerol is listed in CAA Section 111

2-[2-(2-butoxyethoxy)ethoxy]ethanol; TEGBE; triethylene glycol monobutyl ether is listed in CAA Section 112, Section 112(b) - HON.

SDS – Ink cartridge Y (H086078-00-02-OT-E)

California Proposition 65

Substance(s) listed under California Proposition 65:

None.

NFPA rating:



HMIS rating:



Canada Information:

WHMIS Controlled Product:

Not applicable (Manufactured article)

Australia Information:

Statement of Hazardous Nature:

Not classified as hazardous according to criteria of NOHSC

New Zealand Information:

Hazardous Substances and New Organisms Act 1996:

Not regulated

15.2. Chemical safety assessment

No

16. Other Information

Full text of phrases referred to in Section 3:

H318 Causes serious eye damage.

H317 May cause an allergic skin reaction.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H400 Very toxic to aquatic life.

This safety data sheet has been completely updated in compliance to Regulation 2015/830.

This document was prepared by a competent person who has received appropriate training.

SDS – Ink cartridge Y (H086078-00-02-OT-E)

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van

Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This Safety Data Sheet cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of

Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical

Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of

Chemicals.

HMIS: Hazardous Materials Identification System IARC: International Agency for Research on Cancer IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport

Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"

(ICAO)

IMDG: International Maritime Code for Dangerous Goods.INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

NFPA: National Fire Protection Association

NOHSC: National Occupational Health and Safety Commission OSHA: Occupational Safety and Health Administration

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods

by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

SDS – Ink cartridge Y (H086078-00-02-OT-E)

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.

(ACGIH Standard).

WGK: German Water Hazard Class.

WHMIS: Workplace Hazardous Materials Information System

Disclaimer:

Noritsu Precision CO., LTD. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Noritsu Precision CO., LTD. makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Noritsu Precision CO., LTD. will not be responsible for damages resulting from use of or reliance upon this information.

Prepared by: Noritsu Precision CO., LTD. +81 73 456 3969 (Japan)