

Revision Date: 15-Nov-2018 Issuing Date: 18-Sep-2015

Revision Number: 16.1

Safety data sheet number: 5VA926-M7-1

Product Name: TZe cassette ribbon, TZ cassette ribbon (Gold)

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

1.1. Product identifier

Product Name TZe cassette ribbon, TZ cassette ribbon (Gold)

Model Number List For applicable model numbers see the model number list in "16.Other information"

Product Form Mixture

Safety data sheet number 5VA926-M7-1

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

Relevant identified uses
Uses advised against
No information available
No information available

1.3. Details of the supplier of the safety data sheet

<u>Manufacturer</u> Brother Industries, Ltd.

15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan

Telephone (for information): +81-52-824-2735

<u>Importer</u> Brother International Europe Ltd.

Brother House, 1 Tame Street, Audenshaw, Manchester M34 5JE, UK

Telephone (for information): +44-161-330-6531

Brother International (Aust.) Pty. Ltd. ACN 001 393 835

Level 3, Building A, 11 Talavera Road, Macquarie Park, NSW 2113, Australia

Telephone (for information): +61-2-9887-4344

For further information, please contact

E-mail address sds.info@brother.co.jp

1.4. Emergency telephone number

Emergency Telephone CHEMTREC +1-703-527-3887 (International)

CHEMTREC +61-290372994 (Australia)

For France only:

Antipoison Center telephone number: ORFILA +33-1-45-425-959

Section 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute aquatic toxicity	Category 1 - (H400)
Chronic aquatic toxicity	Category 1 - (H410)

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2.2. Label elements
Regulation (EC) No 1272/2008



Warning

Hazard statements

H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)

P501 - Dispose of contents/container to industrial incineration plant

<u>2.3. Other hazards</u>
No information available

Section 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature

Ink on substrate film (Mixture). Article.

Chemical name	CAS No	EC No	EC Index No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH Registration Number
Copper	7440-50-8	231-159-6	-	17	Not classified	No data available
Paraffin wax	8002-74-2	232-315-6	-	8	Not classified	No data available
Zinc	7440-66-6	231-175-3	030-001-01-9	<2	Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	No data available
Wax	**	-	-	**	Not classified	No data available
Synthetic resin	**	-	-	**	Not classified	No data available
Styrene-acrylate copolymer	**	-	-	**	Not classified	No data available
Resin	**	**	-	**	Not classified	No data available

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Polyethylene terephthalate film	**	-	-	**	Not classified	No data available
Organic filler	**	-	-	**	Not classified	No data available
Dispersant	**	-	-	**	Not classified	No data available
Colorant	**	**	-	**	Not classified	Not applicable
Brass powder	**	-	-	**	Not classified	No data available
Additive	**	-	-	**	Not classified	No data available

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

Section 4: First aid measures

4.1. Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contactWash skin with soap and water. In the case of skin irritation or allergic reactions see a

physician.

Ingestion Clean mouth with water and drink afterwards plenty of water.

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

Symptoms No information available

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

Section 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

Unsuitable extinguishing media No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the No information available

Hazardous combustion products

chemical

Carbon monoxide. Carbon dioxide (CO2).

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5.3. Advice for firefighters

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Ensure adequate ventilation.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning upTake up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

Section 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

These products are ink ribbons for Brother Industries, Ltd. TZe cassette, TZ cassette.

Section 8: Exposure controls and personal protection

8.1. Control parameters

Exposure Limits .

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Product Name: TZe cassette ribbon, TZ cassette ribbon (Gold)

Chemical name	European Union	United Kingdom	France	Spain	Germany
Copper	-	TWA: 1 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.2 mg/m ³	-
7440-50-8		TWA: 0.2 mg/m ³	TWA: 1 mg/m ³	TWA: 1 mg/m ³	
		STEL: 0.6 mg/m ³	STEL: 2 mg/m ³		
		STEL: 2 mg/m ³			
Paraffin wax	-	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³	-
8002-74-2		STEL: 6 mg/m ³			
Chemical name	Italy	Portugal	Netherlands	Finland	Denmark
Copper	-	TWA: 0.2 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.02 mg/m ³	TWA: 1.0 mg/m ³
7440-50-8		TWA: 1 mg/m ³			TWA: 0.1 mg/m ³
Paraffin wax	-	TWA: 2 mg/m ³	-	TWA: 1 mg/m ³	TWA: 2 mg/m ³
8002-74-2					
Chemical name	Austria	Switzerland	Poland	Norway	Ireland
Copper	TWA: 1 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.2 mg/m ³	TWA: 0.1 mg/m ³	TWA: 0.2 mg/m ³
7440-50-8	TWA: 0.1 mg/m ³	STEL: 0.2 mg/m ³		TWA: 1 mg/m ³	TWA: 1 mg/m ³
	STEL 4 mg/m ³			STEL: 0.3 mg/m ³	STEL: 0.6 mg/m ³
	STEL 0.4 mg/m ³			STEL: 2 mg/m ³	STEL: 2 mg/m ³
Paraffin wax	-	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³	TWA: 2 mg/m ³
8002-74-2				STEL: 4 mg/m ³	STEL: 6 mg/m ³

Derived No Effect Level (DNEL) No information available.

Predicted No Effect Concentration No information available.

(PNEC)

8.2. Exposure controls

No information available. Appropriate engineering controls

Personal protective equipment Not normally required. For use other than in normal operating procedures (such as in the

event of large spill), the following should be applied:

Eye/face protection No special protective equipment required.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

Environmental exposure controls No information available.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state film

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Product Name: TZe cassette ribbon, TZ cassette ribbon (Gold)

Color Gold

Odor Slight wax odor.

Odor threshold No information available

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pHNo data availableNone knownMelting point / freezing pointNo data availableNone known

Boiling point / boiling range No data available None known

Flash point >150 °C

Evaporation rateNo data availableNone knownFlammability (solid, gas)No data availableNone known

Flammability (solid, gas)

No data available

None known

None known

Upper flammability limit: No data available Lower flammability limit: No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone knownRelative densityNo data availableNone known

Water solubility negligible

Solubility(ies) No information available

Partition coefficientNo data availableNone knownAutoignition temperatureNo data availableNone known

Decomposition temperature Not determined

Kinematic viscosityNo data availableNone knownDynamic viscosityNo data availableNone known

Explosive properties No information available No information available.

Oxidizing properties No information available

9.2. Other information

No information available

Section 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal processing.

10.4. Conditions to avoid

None known based on information supplied

10.5. Incompatible materials

None known based on information supplied

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Product Name: TZe cassette ribbon, TZ cassette ribbon (Gold)

10.6. Hazardous decomposition products

Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: Toxicological information

11.1. Information on toxicological effects

Product Information

Inhalation No information available

Eye contact No information available

Skin contact No information available

Ingestion No information available

Skin corrosion/irritation No information available

Serious eye damage/eye irritation No information available

Respiratory or skin sensitization No information available

Germ cell mutagenicity No information available

Carcinogenicity Printing inks: IARC Classification: Group 3 (Non-classified Human Carcinogen) Other

ingredients of this product have not been classified as carcinogens according to IARC

monographs, NTP and OSHA

Section 12: Ecological information

12.1. Toxicity

Very toxic to aquatic life with long lasting effects.

Contains 74.1 % of components with unknown hazards to the aquatic environment.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Copper	0.0426 - 0.0535: 72 h Pseudokirchneriella subcapitata mg/L EC50 static 0.031 - 0.054: 96 h Pseudokirchneriella subcapitata mg/L EC50 static	0.0068 - 0.0156: 96 h Pimephales promelas mg/L LC50 0.3: 96 h Pimephales promelas mg/L LC50 static 0.2: 96 h Pimephales promelas mg/L LC50 flow-through 0.052: 96 h		0.03: 48 h Daphnia magna mg/L EC50 Static

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		Oncorhynchus mykiss		
		mg/L LC50 flow-through		
		0.3: 96 h Cyprinus carpio		
		mg/L LC50 semi-static		
		0.112: 96 h Poecilia		
		reticulata mg/L LC50		
		flow-through 1.25: 96 h		
		Lepomis macrochirus		
		mg/L LC50 static 0.8: 96		
		h Cyprinus carpio mg/L		
		LC50 static		
Zinc	0.11 - 0.271: 96 h	2.16 - 3.05: 96 h	-	0.139 - 0.908: 48 h
	Pseudokirchneriella	Pimephales promelas		Daphnia magna mg/L
	subcapitata mg/L EC50	mg/L LC50 flow-through		EC50 Static
	static 0.09 - 0.125: 72 h	0.211 - 0.269: 96 h		
	Pseudokirchneriella	Pimephales promelas		
	subcapitata mg/L EC50	mg/L LC50 semi-static		
	static	0.24: 96 h Oncorhynchus		
		mykiss mg/L LC50 flow-		
		through 7.8: 96 h		
		Cyprinus carpio mg/L		
		LC50 static 2.66: 96 h		
		Pimephales promelas		
		mg/L LC50 static 3.5: 96		
		h Lepomis macrochirus		
		mg/L LC50 static 30: 96 h		
		Cyprinus carpio mg/L		
		LC50 0.45: 96 h Cyprinus		
		carpio mg/L LC50 semi-		
		static 0.59: 96 h		
		Oncorhynchus mykiss		
		mg/L LC50 semi-static		
		0.41: 96 h Oncorhynchus		
		mykiss mg/L LC50 static		

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.



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Section 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Section 14: Transport information

IMDG

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Marine pollutant	Not applicable
446	Chariel Draviniana	None

14.6 Special Provisions None

14.7 Transport in bulk according to No information available

Annex II of MARPOL 73/78 and the

IBC Code

RID

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazard	Not applicable
14.6	Special Provisions	None

14.0 Opeolar i Totion

ADR

14.1	UN/ID no	Not regulated
14.2	Proper shipping name	Not regulated
14.3	Hazard Class	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazard	Not applicable
14.6	Special Provisions	None

IATA

UN/ID no	Not regulated
Proper shipping name	Not regulated
Hazard Class	Not regulated
Packing group	Not regulated
Environmental hazard	Not applicable
	Proper shipping name Hazard Class Packing group

14.6 Special Provisions None

Section 15: Regulatory information

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

EU-Regulations

No information available

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National Regulations

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

Section 16: Other information

Model Number List

The model number of the cassette covered by this Safety Data Sheet is as follows.

TZe-334	TZe-344	TZe-354	TZe-M34	TZe-MQ934
TZe-PR234	TZe-PR254	TZe-Z334	TZe-MT3403	TZe-MT3406
TZe-MT3411				

TZ-164 TZ-324 TZ-334 TZ-344 TZ-354 TZ-364 TZ-MQ934

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

Legend

SVHC: Substances of Very High Concern for Authorization:

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

* Trade secret

Key literature references and sources for data

No information available

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Reason for revision

As the Product Safety Information Sheet (PSIS) has been abolished, the model number has been added to "Section 16. Other Information"

Revision Note SDS sections updated

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaime

The information relates only to this product. It may not be valid, if used in combination with any other materials or in any other process, and it is based on our best knowledge as of the date of preparation (revision).

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