

Brother Industries, Ltd.
15-1 Naeshiro-cho, Mizuho-ku,
Nagoya 467-8561, Japan
Telephone (for information): +81-52-824-2735

Product name: TZe cassette, TZ cassette
With regard to the model number, please find attached the list of the model numbers.

Use of Product: These products are TZe cassette or TZ cassette for Brother Industries, Ltd. P-touch.

The above product consists of the following major parts and components.
Also please find attached the SDS.

TZe cassette and TZ cassette are 'Article' and we have voluntarily made the SDS.

	Name of part/Component	Material	SDS No.
1)	Cassette case upper	ABS	N/A
2)	Cassette case lower	ABS	N/A
3)	Film tape	PET	N/A
4)	Spacer	PP or PET	N/A
5)	Ribbon clutch spring	SWC or SWPB	N/A
6)	Ribbon clutch spring holder	POM	N/A
7)	Take-up spool	ABS or HIPS	N/A
8)	Take-up spool spring	SUS	N/A
9)	Tape feed roller	ABS or HIPS	N/A
10)	Adhesive tape roller	PP	N/A
11)	Tape roller	PE	N/A
12)	Sensor parts	ABS	N/A
13)	Color indication	PS or Paper	N/A
14)	TZe cassette ribbon / TZ cassette ribbon	--	5VA926-M1-EUUSOTHER
15)	TZe cassette tape / TZ cassette tape	--	5VA926-M2-EUUSOTHER
16)	Spool	ABS or AS or HIPS	N/A

Model Number List

The model numbers to be covered with PSIS No. 5VA926-P1-EUUSOTHER are as below.

TZe-111	TZe-111V	TZe-121	TZe-121V	TZe-131
TZe-1312PK	TZe-131V	TZe-132	TZe-133	TZe-135
TZe-141	TZe-141V	TZe-145	TZe-151	TZe-151V
TZe-161	TZe-161V	TZe-211	TZe-211V	TZe-221
TZe-221V	TZe-221V2	TZe-222	TZe-223	TZe-231
TZe-2312PK	TZe-231CIV	TZe-231S	TZe-231V	TZe-231V2
TZe-231V10	TZe-232	TZe-233	TZe-241	TZe-241CIV
TZe-241V	TZe-242	TZe-243	TZe-251	TZe-251CIV
TZe-251V	TZe-251V10	TZe-252	TZe-253	TZe-261
TZe-261CIV	TZe-261V	TZe-262	TZe-263	TZe-315
TZe-31M3	TZe-31V3	TZe-31VA	TZe-325	TZe-32M3
TZe-334	TZe-335	TZe-344	TZe-345	TZe-354
TZe-355	TZe-365	TZe-421	TZe-431	TZe-431S
TZe-435	TZe-441	TZe-451	TZe-461	TZe-521
TZe-531	TZe-535	TZe-541	TZe-545	TZe-551
TZe-555	TZe-561	TZe-611	TZe-611V	TZe-621
TZe-621V	TZe-631	TZe-631V	TZe-641	TZe-641V
TZe-651	TZe-651V	TZe-661	TZe-661V	TZe-721
TZe-731	TZe-741	TZe-751	TZe-AF131	TZe-AF231
TZe-B31	TZe-B41	TZe-B51	TZe-BA151	TZe-BA155
TZe-BW31	TZe-BY31	TZe-C31	TZe-C51	TZe-DB31
TZe-DH31	TZe-DL31	TZe-DP31	TZe-DW31	TZe-DY31
TZe-FX211	TZe-FX221	TZe-FX231	TZe-FX231CS	TZe-FX241
TZe-FX251	TZe-FX261	TZe-FX611	TZe-FX621	TZe-FX631
TZe-FX631CS	TZe-FX641	TZe-FX651	TZe-FX661	TZe-HW31
TZe-J231	TZe-M251	TZe-M31	TZe-M931	TZe-M941
TZe-M951	TZe-M961	TZe-MQ835	TZe-MQ934	TZe-MQG35
TZe-MQL35	TZe-MQP35	TZe-N201	TZe-N221	TZe-N231
TZe-N241	TZe-N251	TZe-Q35V3	TZe-S121	TZe-S131
TZe-S135	TZe-S141	TZe-S151	TZe-S211	TZe-S221
TZe-S231	TZe-S231CS	TZe-S241	TZe-S241CS	TZe-S251
TZe-S261	TZe-S621	TZe-S631	TZe-S641	TZe-S641CS
TZe-S651	TZe-S661	TZe-S941	TZe-S951	TZe-S961
TZe-SE4	TZe-SM941	TZe-SM951	TZe-SM961	TZe-UB31
TZe-UP31				

HGe-121	HGe-1215PK	HGe-131	HGe-1315PK	HGe-131V
HGe-131V5	HGe-141	HGe-1415PK	HGe-141V	HGe-141V5
HGe-151	HGe-1515PK	HGe-151V	HGe-151V5	HGe-161
HGe-1615PK	HGe-211	HGe-2115PK	HGe-221	HGe-2215PK
HGe-221V	HGe-221V5	HGe-231	HGe-2315PK	HGe-231V
HGe-231V5	HGe-241	HGe-2415PK	HGe-241V	HGe-241V5
HGe-251	HGe-2515PK	HGe-251V	HGe-251V5	HGe-261
HGe-2615PK	HGe-261V	HGe-261V5	HGe-621	HGe-6215PK
HGe-621V5	HGe-631	HGe-6315PK	HGe-631V	HGe-631V5
HGe-641	HGe-6415PK	HGe-641V	HGe-641V5	HGe-651
HGe-6515PK	HGe-651V	HGe-651V5	HGe-661	HGe-6615PK
HGe-9415PK	HGe-9515PK	HGe-9615PK	HGe-M931	HGe-M931V
HGe-M931V5	HGe-M941	HGe-M9415PK	HGe-M941V	HGe-M941V5
HGe-M951	HGe-M9515PK	HGe-M951V	HGe-M951V5	HGe-M961
HGe-S121	HGe-S1215PK	HGe-S131	HGe-S1315PK	HGe-S141
HGe-S1415PK	HGe-S151	HGe-S1515PK	HGe-S211	HGe-S2115PK
HGe-S221	HGe-S2215PK	HGe-S231	HGe-S2315PK	HGe-S231V
HGe-S241	HGe-S2415PK	HGe-S241V	HGe-S251	HGe-S2515PK
HGe-S251V	HGe-S261	HGe-S2615PK	HGe-S621	HGe-S6215PK
HGe-S631	HGe-S6315PK	HGe-S631V	HGe-S641	HGe-S6415PK
HGe-S641V	HGe-S651	HGe-S6515PK	HGe-S651V	HGe-S661
HGe-S6615PK	HGe-S9415PK	HGe-S9515PK	HGe-S9615PK	HGe-SM931
HGe-SM931V	HGe-SM941	HGe-SM941V	HGe-SM951	HGe-SM951V
HGe-SM961	HGe-SM961V5			

TZ-111	TZ-111V	TZ-121	TZ-121V	TZ-122
TZ-123	TZ-125	TZ-131	TZ-131V	TZ-132
TZ-133	TZ-135	TZ-141	TZ-141V	TZ-143
TZ-145	TZ-151	TZ-151V	TZ-152	TZ-153
TZ-155	TZ-161	TZ-161V	TZ-164	TZ-165
TZ-211	TZ-211V	TZ-221	TZ-2212PK	TZ-221V
TZ-221V2	TZ-222	TZ-223	TZ-231	TZ-2312PK
TZ-231CIV	TZ-231S	TZ-231V	TZ-231V10	TZ-231V2
TZ-232	TZ-233	TZ-241	TZ-241CIV	TZ-241V
TZ-2413	TZ-242	TZ-243	TZ-251	TZ-251CIV
TZ-251V	TZ-251V10	TZ-252	TZ-253	TZ-261
TZ-261CIV	TZ-261V	TZ-262	TZ-263	TZ-315
TZ-31M3	TZ-31V3	TZ-31VA	TZ-324	TZ-325
TZ-334	TZ-335	TZ-344	TZ-345	TZ-354
TZ-355	TZ-364	TZ-365	TZ-411	TZ-421
TZ-431	TZ-431S	TZ-435	TZ-441	TZ-451
TZ-455	TZ-461	TZ-511	TZ-521	TZ-531
TZ-535	TZ-541	TZ-545	TZ-551	TZ-555
TZ-561	TZ-611	TZ-611V	TZ-621	TZ-621V
TZ-631	TZ-631V	TZ-635	TZ-641	TZ-641V
TZ-651	TZ-651V	TZ-655	TZ-661	TZ-661V
TZ-711	TZ-721	TZ-731	TZ-735	TZ-741
TZ-751	TZ-755	TZ-761	TZ-831	TZ-841
TZ-851	TZ-931	TZ-941	TZ-951	TZ-A25
TZ-A31	TZ-A51	TZ-AF131	TZ-AF231	TZ-AFG31
TZ-AFP31	TZ-AFW31	TZ-B21	TZ-B31	TZ-B41
TZ-B51	TZ-BA151	TZ-BA155	TZ-BW31	TZ-BY31
TZ-C21	TZ-C31	TZ-C41	TZ-C51	TZ-D21
TZ-D231	TZ-D241	TZ-D31	TZ-D41	TZ-D51
TZ-D631	TZ-DB31	TZ-DB41	TZ-DC31	TZ-DE31
TZ-DF31	TZ-DG31	TZ-DH31	TZ-DH41	TZ-DL31
TZ-DL41	TZ-DP31	TZ-DV31A	TZ-DV31B	TZ-DW31
TZ-DY31	TZ-FX111	TZ-FX121	TZ-FX131	TZ-FX141
TZ-FX151	TZ-FX161	TZ-FX211	TZ-FX221	TZ-FX231
TZ-FX241	TZ-FX242	TZ-FX251	TZ-FX261	TZ-FX262
TZ-FX431	TZ-FX611	TZ-FX621	TZ-FX631	TZ-FX641
TZ-FX651	TZ-FX661	TZ-FX731	TZ-GB31	TZ-GY31
TZ-HB31	TZ-HW31	TZ-M21	TZ-M241	TZ-M251
TZ-M31	TZ-M41	TZ-M51	TZ-M831	TZ-M841
TZ-M851	TZ-M931	TZ-M941	TZ-M951	TZ-M961
TZ-MQ835	TZ-MQ934	TZ-MQG35	TZ-MQL35	TZ-MQP35

TZ-N201	TZ-N211	TZ-N221	TZ-N231	TZ-N241
TZ-N251	TZ-N631	TZ-N641	TZ-N651	TZ-Q35V3
TZ-S111	TZ-S121	TZ-S131	TZ-S135	TZ-S141
TZ-S145	TZ-S151	TZ-S155	TZ-S161	TZ-S211
TZ-S221	TZ-S231	TZ-S231CS	TZ-S241	TZ-S241CS
TZ-S251	TZ-S261	TZ-S611	TZ-S621	TZ-S631
TZ-S641	TZ-S641CS	TZ-S651	TZ-S661	TZ-SE4
TZ-SM941	TZ-SM951	TZ-SM961	TZ-UB31	TZ-UP31
TZ-US31				
HG-131	HG-131V	HG-131V5	HG-141	HG-1415PK
HG-141V	HG-141V5	HG-151	HG-1515PK	HG-151V
HG-151V5	HG-211	HG-221	HG-2215PK	HG-221V
HG-221V5	HG-231	HG-2315PK	HG-231V	HG-231V5
HG-241	HG-2415PK	HG-241V	HG-241V5	HG-251
HG-2515PK	HG-251V	HG-251V5	HG-261	HG-261V
HG-261V5	HG-621	HG-621V5	HG-631	HG-631V
HG-631V5	HG-641	HG-6415PK	HG-641V	HG-641V5
HG-651	HG-6515PK	HG-651V	HG-651V5	HG-M931
HG-M931V	HG-M931V5	HG-M941	HG-M9415PK	HG-M941V
HG-M941V5	HG-M951	HG-M9515PK	HG-M951V	HG-M951V5

Product name: TZe cassette ribbon, TZ cassette ribbon
(Please refer to PSIS to find the applicable models)

Issuing Date: 08-November-2010
Revision Date: 10-November-2012
Version: 6
SDS No: 5VA926-M1-EUUSOTHER

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

1.1 Product identifier

Product name TZe cassette ribbon, TZ cassette ribbon

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

Relevant Identified Use(s) These products are ink ribbons for Brother Industries, Ltd. TZe cassette ribbon, TZ cassette ribbon.

1.3 Details of the supplier of the safety data sheet

Manufacturer Brother Industries, Ltd.
15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan
Telephone (for information): +81-52-824-2735

Importer (USA) Brother International Corporation
200 Crossing Boulevard, Bridgewater, NJ 08807, USA
Telephone (for information): +1-800-284-4329

Importer (Canada) Brother International Corporation (Canada) Ltd.
1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada
Telephone (for information): +1-514-685-0600

Importer (Europe) Brother International Europe Ltd.
Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK
Telephone (for information): +44-161-330-6531

Importer (Australia) 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

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

1.4 Emergency telephone number

Emergency Telephone (24 hours) CHEMTREC
+1-703-527-3887 (International)
+1-800-424-9300 (North America)

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

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not classified as hazardous

Classification according to Directive 1999/45/EC

Not classified as hazardous

Australia Classification

Not classified as hazardous according to the criteria of NOHSC

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms

None

Signal Word

None

Hazard Statements

None

Precautionary statements

None

2.3 Other hazards

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

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SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture: Ink on substrate film (Mixture).

Chemical Name	CAS-No	EC-No	Classification (67/548/EEC)	Classification (EU Reg. 1272/2008)	Black w/w%	White w/w%	Red w/w%	Blue w/w%	Gold w/w%
Carbon Black	1333-86-4	215-609-9	Not classified	Not classified	2-9	-	-	-	-
Paraffin wax	8002-74-2	232-315-6	Not classified	Not classified	<=12	7	<=10	<=10	<=9
Titanium dioxide	13463-67-7	236-675-5	Not classified	Not classified	-	33-35	-	-	-
Silicon Dioxide (amorphous)	7631-86-9	231-545-4	Not classified	Not classified	-	2	-	-	-
Copper	7440-50-8	231-159-6	Not classified	Not classified	-	-	-	-	<=17
Copper compound	**	**	Not classified	Not classified	-	-	-	<=4	-
Colorant	**	**	Not classified	Not classified	-	**	**	**	**
Resin	**	**	Not classified	Not classified	**	**	**	**	**
Wax	**	**	Not classified	Not classified	**	**	**	**	**
Additive	**	**	Not classified	Not classified	**	**	**	**	**
Synthetic resin	**	**	Not classified	Not classified	**	-	**	**	**
Organic Filler	**	**	Not classified	Not classified	**	-	**	**	**
Dispersant	**	**	Not classified	Not classified	**	-	**	**	**
Brass powder	**	**	Not classified	Not classified	-	-	-	-	**
Polyethylene terephthalate film	**	**	Not classified	Not classified	**	**	**	**	**

For the full text of R-phrases and H-Statements see Section 16

** CONFIDENTIAL

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	If symptoms persist, obtain medical attention.
Inhalation	Not applicable.
Skin contact	Wash affected skin with plenty of water or soap and water.
Eye contact	Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.
Ingestion	Obtain medical attention. Wash out mouth with water and give 100 - 200 ml of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No specific effects and/or symptoms have been reported or known

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

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SECTION 5: Firefighting measures

- 5.1 Extinguishing media**
Suitable Extinguishing Media Extinguish preferably with dry chemical, carbon dioxide, water mist, foam.

Unsuitable Extinguishing Media None.
- 5.2 Special hazards arising from the substance or mixture** No information available
- 5.3 Advice for firefighters** A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures** Not normally required.
- 6.2 Environmental precautions** Avoid release to the environment.
- 6.3 Methods and materials for containment and cleaning up** Not applicable
- 6.4 Reference to other sections** For personal protection: See section 8.
For disposal considerations: See section 13.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** Avoid contact with skin and eyes.
- 7.2 Conditions for safe storage, including any incompatibilities** Keep away from oxidizing agents.
- 7.3 Specific end use(s)** These products are ink ribbons for Brother Industries, Ltd. TZe cassette ribbon, TZ cassette ribbon.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Occupational Exposure Limits

Chemical Name	Carbon Black 1333-86-4
ACGIH TLV	TWA: 3 mg/m ³ inhalable fraction
OSHA PEL	TWA: 3.5 mg/m ³
European Union	-
The United Kingdom	STEL: 7 mg/m ³ TWA: 3.5 mg/m ³
France	TWA: 3.5 mg/m ³
Spain	TWA: 3.5 mg/m ³
Germany	Carc
Portugal	TWA: 3.5 mg/m ³
Finland	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³
Denmark	TWA: 3.5 mg/m ³
Poland	TWA: 4.0 mg/m ³

SAFETY DATA SHEET

Product name: TZe cassette ribbon, TZ cassette ribbon
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Norway	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³
Ireland	TWA: 3.5 mg/m ³ STEL: 7 mg/m ³
Chemical Name	Paraffin wax 8002-74-2
ACGIH TLV	TWA: 2 mg/m ³ fume
OSHA PEL	-
European Union	-
The United Kingdom	STEL: 6 mg/m ³ TWA: 2 mg/m ³
France	TWA: 2 mg/m ³
Spain	TWA: 2 mg/m ³
Portugal	TWA: 2 mg/m ³
Finland	TWA: 1 mg/m ³
Denmark	TWA: 2 mg/m ³
Switzerland	TWA: 2 mg/m ³
Poland	TWA: 2 mg/m ³
Norway	TWA: 2 mg/m ³ STEL: 4 mg/m ³
Ireland	TWA: 2 mg/m ³ STEL: 6 mg/m ³
Chemical Name	Titanium dioxide 13463-67-7
ACGIH TLV	TWA: 10 mg/m ³
OSHA PEL	TWA: 15 mg/m ³ total dust
European Union	-
The United Kingdom	STEL: 30 mg/m ³ STEL: 12 mg/m ³ TWA: 10 mg/m ³ TWA: 4 mg/m ³
France	TWA: 10 mg/m ³
Spain	TWA: 10 mg/m ³
Germany	Carc
Portugal	TWA: 10 mg/m ³
Denmark	TWA: 6 mg/m ³
Austria	STEL 10 mg/m ³ TWA: 5 mg/m ³
Switzerland	TWA: 3 mg/m ³
Poland	NDSch: 30 mg/m ³ TWA: 10.0 mg/m ³ TWA: 10 mg/m ³
Norway	TWA: 5 mg/m ³ STEL: 10 mg/m ³
Ireland	TWA: 10 mg/m ³ TWA: 4 mg/m ³
Chemical Name	Silicon Dioxide (amorphous) 7631-86-9
ACGIH TLV	-
OSHA PEL	20mppcf 80(mg/m ³)/%SiO ₂
European Union	-
The United Kingdom	STEL: 18 mg/m ³ STEL: 7.2 mg/m ³ TWA: 6 mg/m ³ TWA: 2.4 mg/m ³
Germany	TWA: 4 mg/m ³
Austria	TWA: 4 mg/m ³ TWA: 0.3 mg/m ³
Switzerland	TWA: 4 mg/m ³ TWA: 0.3 mg/m ³
Norway	TWA: 1.5 mg/m ³ STEL: 3 mg/m ³
Ireland	TWA: 6 mg/m ³ TWA: 2.4 mg/m ³

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Chemical Name	Copper 7440-50-8
ACGIH TLV	TWA: 0.2 mg/m ³ fume TWA: 1 mg/m ³ Cu dust and mist
OSHA PEL	TWA: 1 mg/m ³ dusts and mists (as Cu)
European Union	-
The United Kingdom	STEL: 0.6 mg/m ³ STEL: 2 mg/m ³ TWA: 0.2 mg/m ³ TWA: 1 mg/m ³
France	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ STEL: 2 mg/m ³
Spain	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³
Germany	TWA: 0.1 mg/m ³ Ceiling / Peak: 0.2 mg/m ³
Portugal	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³
The Netherlands	TWA: 0.1 mg/m ³
Finland	TWA: 1 mg/m ³ TWA: 0.1 mg/m ³
Denmark	TWA: 1.0 mg/m ³ TWA: 0.1 mg/m ³
Austria	STEL 4 mg/m ³ STEL 0.4 mg/m ³ TWA: 1 mg/m ³ TWA: 0.1 mg/m ³
Switzerland	STEL: 0.2 ppm TWA: 0.1 ppm
Poland	TWA: 0.2 mg/m ³
Norway	TWA: 0.1 mg/m ³ TWA: 1 mg/m ³ STEL: 0.3 mg/m ³ STEL: 3 mg/m ³
Ireland	TWA: 0.2 mg/m ³ TWA: 1 mg/m ³ STEL: 2 mg/m ³

8.2 Exposure controls

Appropriate engineering controls Good general ventilation should be sufficient under normal use.

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 Protection	Safety goggles.
Hand Protection	Protective gloves.
Skin and body protection	Not normally required.
Respiratory protection	No special protective equipment required.

Environmental Exposure Controls Not normally required.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	Film
Color	Black. White. Red. Blue. Gold.
Odor	Slight wax's odor
Odor Threshold	No information available
pH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash Point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	No information available
Solubility(ies)	Negligible (water)
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	Not applicable
Explosive properties	Not applicable
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.
10.3 Possibility of hazardous reactions	No information available.
10.4 Conditions to avoid	Keep away from heat. Avoid friction, sparks, or other means of ignition.
10.5 Incompatible materials	Strong oxidizing agents.
10.6 Hazardous decomposition products	Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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/irritation No information available.

Respiratory or skin sensitisation No information available.

Mutagenicity No information available.

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

Titanium dioxide: IARC Classification: Group 2B (Possible human carcinogen)

Carbon Black: In 1996, the IARC re-evaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This classification is given to chemicals, for which there is inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats did not show any association between carbon black and lung tumors.

Other ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA.

Product name: TZe cassette ribbon, TZ cassette ribbon
(Please refer to PSIS to find the applicable models)

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SECTION 12: Ecological information

12.1 Toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Carbon Black 1333-86-4			EC ₅₀ : >5600 mg/L 24 h (Daphnia magna)
Silicon Dioxide (amorphous) 7631-86-9	EC ₅₀ : 440 mg/L 72 h (Pseudokirchneriella subcapitata)	LC ₅₀ : 5000 mg/L 96 h static (Brachydanio rerio)	EC ₅₀ : 7600 mg/L 48 h (Ceriodaphnia dubia)
Copper 7440-50-8	EC ₅₀ : 0.0426 - 0.0535 mg/L 72 h static (Pseudokirchneriella subcapitata) EC ₅₀ : 0.031 - 0.054 mg/L 96 h static (Pseudokirchneriella subcapitata)	LC ₅₀ : 0.0068 - 0.0156 mg/L 96 h (Pimephales promelas) LC ₅₀ : 0.3 mg/L 96 h static (Pimephales promelas) LC ₅₀ : 0.2 mg/L 96 h flow-through (Pimephales promelas) LC ₅₀ : 0.052 mg/L 96 h flow-through (Oncorhynchus mykiss) LC ₅₀ : 1.25 mg/L 96 h static (Lepomis macrochirus) LC ₅₀ : 0.3 mg/L 96 h semi-static (Cyprinus carpio) LC ₅₀ : 0.8 mg/L 96 h static (Cyprinus carpio) LC ₅₀ : 0.112 mg/L 96 h flow-through (Poecilia reticulata)	EC ₅₀ : 0.03 mg/L 48 h Static (Daphnia magna)

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 This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods Dispose of in accordance with Federal, State, and local regulations.

Product name: TZe cassette ribbon, TZ cassette ribbon
(Please refer to PSIS to find the applicable models)

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SECTION 14: Transport information

Not classified according to the United Nations "Recommendations on the Transport of Dangerous Goods"

14.1 UN Number	None
14.2 UN proper shipping name	None
14.3 Transport hazard class(es)	None
14.4 Packing Group	None
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code	Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	<p>EU: Not classified as dangerous for supply/use. (1999/45/EC)</p> <p>USA: All chemical substances contained in this product are and had been listed on the TSCA Chemical Substances Inventory, and none is subject to any of the following TSCA requirements: section 4 test rules; proposed or final section 5(a)(2) significant new use rules; section 5(e) consent orders; section 8(a) preliminary assessment information rules; and section 8(d) health and safety data reporting rules.</p> <p>Canada: WHMIS: Not applicable. (Manufactured article)</p>
15.2 Chemical Safety Assessment	No.

Product name: TZe cassette ribbon, TZ cassette ribbon
(Please refer to PSIS to find the applicable models)

Issuing Date: 08-November-2010
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Version: 6
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SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3 None

Full text of H-Statements referred to under sections 2 and 3 None

Additional information 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).

Revision Note Updated for compliance with EU Regulations 453/2010 and 172/2008 (CLP).

References: U.S. 29CFR Part 1910
ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans World Health Organization
EU Directive 91/322/EEC and 2000/39/EC
NTP 11th Report on Carcinogens

Abbreviations: ACGIH: American Conference of Governmental Industrial Hygienists
IARC: International Agency for Research on Cancer
NOHSC: National Occupational Health and Safety Commission (Australia)
NTP: National Toxicology Program (US)
OSHA: Occupational Safety and Health Administration (US)
PEL: Permissible Exposure Limit
STEL: Short Term Exposure Limit
TLV: Threshold Limit Value (ACGIH)
TSCA: Toxic Substances Control Act (US)
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Material Information System (Canada)

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

Issuing Date: 08-November-2010
Revision Date: 10-November-2012
Version: 4
SDS No: 5VA926-M2-EUUSOTHER

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

1.1 Product identifier

Product name TZe cassette tape, TZ cassette tape

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

Relevant Identified Use(s) These products are tapes for Brother Industries, Ltd. TZe cassette tape, TZ cassette tape

1.3 Details of the supplier of the safety data sheet

Manufacturer Brother Industries, Ltd.
15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan
Telephone (for information): +81-52-824-2735

Importer (USA) Brother International Corporation
200 Crossing Boulevard, Bridgewater, NJ 08807, USA
Telephone (for information): +1-800-284-4329

Importer (Canada) Brother International Corporation (Canada) Ltd.
1 Hotel de Ville, Dollard des Ormeaux, Quebec, H9B 3H6, Canada
Telephone (for information): +1-514-685-0600

Importer (Europe) Brother International Europe Ltd.
Brother House, 1 Tame Street, Guide Bridge, Audenshaw, Manchester M34 5JE, UK
Telephone (for information): +44-161-330-6531

Importer (Australia) 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

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

1.4 Emergency telephone number

**Emergency Telephone
(24 hours)** CHEMTREC
+1-703-527-3887 (International)
+1-800-424-9300 (North America)

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

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

Issuing Date: 08-November-2010
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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Not classified as hazardous

Classification according to Directive 1999/45/EC

Not classified as hazardous

Australia Classification

Not classified as hazardous according to the criteria of NOHSC

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008

Hazard pictograms

None

Signal Word

None

Hazard Statements

None

Precautionary statements

None

2.3 Other hazards

This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description of the mixture: TZe cassette tape (Article), TZ cassette tape (Article).

Chemical Name	CAS-No	EC-No	w/w%	Classification (67/548/EEC)	Classification (EU Reg. 1272/2008)
Polyester film	**	**	-	Not classified	Not classified
Ink	**	**	-	Not classified	Not classified
Acrylic adhesive	**	**	-	Not classified	Not classified
Liner	**	**	-	Not classified	Not classified

For the full text of R-phrases and H-Statements see Section 16

** CONFIDENTIAL

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

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SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	If symptoms persist, obtain medical attention.
Inhalation	Not applicable.
Skin contact	Wash affected skin with plenty of water or soap and water.
Eye contact	Obtain medical attention. If substance has got into the eyes, immediately wash out with plenty of water for at least 15 minutes.
Ingestion	Obtain medical attention. Wash out mouth with water and give 100 - 200 ml of water to drink.

4.2 Most important symptoms and effects, both acute and delayed

No specific effects and/or symptoms have been reported or known

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable Extinguishing Media	Extinguish preferably with dry chemical, carbon dioxide, water, foam.
Unsuitable Extinguishing Media	None.

5.2 Special hazards arising from the substance or mixture

No information available

5.3 Advice for firefighters

A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Not normally required.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and materials for containment and cleaning up

Not applicable

6.4 Reference to other sections

For personal protection: See section 8.
For disposal considerations: See section 13.

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

Issuing Date: 08-November-2010
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SECTION 7: Handling and storage

- 7.1 Precautions for safe handling** No special requirements.
- 7.2 Conditions for safe storage, including any incompatibilities** Keep away from oxidizing agents.
- 7.3 Specific end use(s)** These products are tapes for Brother Industries, Ltd. TZe cassette tape, TZ cassette tape.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

- Appropriate engineering controls** Good general ventilation should be sufficient under normal use.
- 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 Protection | Safety goggles. |
| Hand Protection | Protective gloves. |
| Skin and body protection | Not normally required. |
| Respiratory protection | No special protective equipment required. |
- Environmental Exposure Controls** Not normally required.

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(Please refer to PSIS to find the applicable models)

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	
Physical state	Tape rolled
Color	Various colors
Odor	Odorless
Odor Threshold	No information available
pH	Not applicable
Melting point/freezing point	Not applicable
Initial boiling point and boiling range	Not applicable
Flash Point	Not applicable
Evaporation rate	Not applicable
Flammability (solid, gas)	No information available
Upper/lower flammability or explosive limits	No information available
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	No information available
Solubility(ies)	Insoluble (water)
Partition coefficient: n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	Not applicable
Explosive properties	Not applicable
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.
10.3 Possibility of hazardous reactions	No information available.
10.4 Conditions to avoid	Keep away from heat. Avoid friction, sparks, or other means of ignition.
10.5 Incompatible materials	Strong oxidizing agents.
10.6 Hazardous decomposition products	Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

Issuing Date: 08-November-2010
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SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

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/irritation No information available.

Respiratory or skin sensitisation No information available.

Mutagenicity No information available.

Carcinogenicity **Ingredients of this product have not been classified as carcinogens according to IARC monographs, NTP and OSHA.**

SECTION 12: Ecological information

12.1 Toxicity No information available.

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 This product contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This product contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6 Other adverse effects No information available

SECTION 13: Disposal considerations

13.1 Waste treatment methods Dispose of in accordance with Federal, State, and local regulations.

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

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SECTION 14: Transport information

Not classified according to the United Nations "Recommendations on the Transport of Dangerous Goods"

14.1 UN Number	None
14.2 UN proper shipping name	None
14.3 Transport hazard class(es)	None
14.4 Packing Group	None
14.5 Environmental hazards	None
14.6 Special precautions for user	None
14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code	Not applicable

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture	<p>EU: Not classified as dangerous for supply/use. (1999/45/EC)</p> <p>USA: All chemical substances contained in this product are and had been listed on the TSCA Chemical Substances Inventory, and none is subject to any of the following TSCA requirements: section 4 test rules; proposed or final section 5(a)(2) significant new use rules; section 5(e) consent orders; section 8(a) preliminary assessment information rules; and section 8(d) health and safety data reporting rules.</p> <p>Canada: WHMIS: Not applicable. (Manufactured article)</p>
15.2 Chemical Safety Assessment	No.

Product name: TZe cassette tape, TZ cassette tape
(Please refer to PSIS to find the applicable models)

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SDS No: 5VA926-M2-EUUSOTHER

SECTION 16: Other information

Full text of R-phrases referred to under sections 2 and 3	None
Full text of H-Statements referred to under sections 2 and 3	None
Additional information	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).
Revision Note	Updated for compliance with EU Regulations 453/2010 and 172/2008 (CLP).
References:	U.S. 29CFR Part 1910 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans World Health Organization EU Directive 91/322/EEC and 2000/39/EC NTP 11th Report on Carcinogens
Abbreviations:	ACGIH: American Conference of Governmental Industrial Hygienists IARC: International Agency for Research on Cancer NOHSC: National Occupational Health and Safety Commission (Australia) NTP: National Toxicology Program (US) OSHA: Occupational Safety and Health Administration (US) PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit TLV: Threshold Limit Value (ACGIH) TSCA: Toxic Substances Control Act (US) TWA: Time Weighted Average WHMIS: Workplace Hazardous Material Information System (Canada)