

PRODUCT SAFETY INFORMATION SHEET (PSIS) Page: 1 of 1 Issued: April 7, 2011 Revised: July 7, 2011 Version number: 2

PSIS No. 5VA926-P2-EUUSOTHER

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

Product name:	TZe Fabric cassette, TZ Fabric cassette With regard to the model number, please find attached the list of the model numbers.
Use of Product:	These products are TZe Fabric cassette or TZ Fabric cassette for Brother Industries, Ltd. P-touch.

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

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

	Name of part/Component	Material	MSDS No.
1)	Cassette case upper	ABS	N/A
2)	Cassette case lower	ABS	N/A
3)	Ribbon clutch spring	SWPB	N/A
4)	Ribbon clutch spring holder	POM	N/A
5)	Take-up spool	ABS	N/A
6)	Take-up spool spring	SUS	N/A
7)	Tape feed roller	ABS	N/A
8)	Sensor parts	ABS	N/A
9)	Color indication	PS or Paper	N/A
10)	TZe cassette ribbon / TZ cassette ribbon		5VA926-M1-EUUSOTHER
11)	TZe Fabric cassette tape / TZ Fabric cassette tape		5VA926-M3-EUUSOTHER
12)	Spool	ABS or HIPS	N/A

Model Number List

The model numbers to be covered with PSIS No. 5VA926-P2-EUUSOTHER are as below.

TZe-FA3 TZ-FA3 TZ-F232	TZe-FA3S TZ-FA3S TZ-FE32	TZe-FA4 TZ-FA4	TZe-FA5S TZ-FA53	TZe-FA63 TZ-FA63	TZe-FAE3 TZ-FA4B	TZ-FAE3	



Product Name

SAFETY DATA SHEET

TZe cassette ribbon, TZ cassette ribbon SDS No. 5VA926-M1-EUUSOTHER (Please refer to PSIS to find the applicable models.) **IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE** 1. **COMPANY/UNDERTAKING** Product Name: TZe cassette ribbon, TZ cassette ribbon Use: These products are ink ribbons for Brother Industries, Ltd. TZe cassette or TZ cassette. Brother Industries, Ltd. Manufacturer: 15-1 Naeshiro-cho, Mizuho-ku, Nagoya 467-8561, Japan Telephone (for information): +81-52-824-2735 Importer USA: **Brother International Corporation** 100 Somerset Corporate Boulevard, P.O. Box 6911, Bridgewater, NJ 08807-0911, 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 **Emergency Phone No.:** 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

2. HAZARDS IDENTIFICATION

E-mail address for information:

Potential Health Effects:	Inhalation: No specific effects and/or symptoms have been reported or known.
	Skin Contact: No specific effects and/or symptoms have been reported or known.
	Eye Contact: No specific effects and/or symptoms have been reported or known.
	Ingestion: No specific effects and/or symptoms have been reported or known.
EU Classification:	Not classified as hazardous according to EU Directive 1999/45/EC.
Australia Classification:	Not classified as hazardous according to the criteria of NOHSC.

sds.info@brother.co.jp

Version number: 3



Version number: 3 SDS No. 5VA926-M1-EUUSOTHER

Product Name

TZe cassette ribbon, TZ cassette ribbon

(Please refer to PSIS to find the applicable models.)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemic	al Nam	e:

Ink on substrate film (Mixture)

Chemical Name	CAS No.	EC No.	EU Hazard Symbols	EU Risk Phrases	Black %W/W	White %W/W	Red %W/W	Blue %W/W	Gold %W/W
Carbon Black	1333-86-4	215-609-9	*	*	2-9	-	-	-	-
Paraffin wax	8002-74-2	232-315-6	*	*	≤12	7	≤10	≤10	≤9
Titanium dioxide	13463-67-7	236-675-5	*	*	-	33-35	-	-	-
Silicon Dioxide (amorphous)	7631-86-9	231-545-4	*	*	-	2	-	-	-
Copper	7440-50-8	231-159-6	*	*	-	-	-	-	≤17
Copper compound	**	**	*	*	-	-	-	≤4	-
Colorant	**	**	*	*	-	**	**	**	**
Resin	**	**	*	*	**	**	**	**	**
Wax	**	**	*	*	**	**	**	**	**
Additive	**	**	*	*	**	**	**	**	**
Synthetic resin	**	**	*	*	**	-	**	**	**
Organic filler	**	**	*	*	**	-	**	**	**
Dispersant	**	**	*	*	**	-	**	**	**
Brass powder	**	**	*	*	-	-	-	-	**
Polyethylene terephthalate film	**	**	*	*	**	**	**	**	**

* Not classified

** Confidential

4. FIRST AID MEASURES

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 200-300 ml (half a pint) of water to drink.

5. FIRE-FIGHTING MEASURES

Extinguishing Media:	Extinguish preferably with dry chemical, Carbon dioxide, Water mist, Foam.
Unsuitable Extinguishing Media:	None.
Special firefighting procedures:	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.
Unusual fire and explosion hazards:	No data.



Version number: 3 SDS No. 5VA926-M1-EUUSOTHER

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

6. ACCIDENTAL RELEASE MEASURES

Personal Protection:	Not normally required. See Section: 8
Environmental Precautions:	Avoid release to the environment
Methods for Cleaning Up:	Not applicable.

7. HANDLING AND STORAGE

Handling:

Avoid contact with skin and eyes.

Storage:

Keep away from oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits:

SUBSTANCE	CAS No.	OSHA PEL	ACGIH TLV	EU IOELV
Carbon Black	1333-86-4	3.5 mg/m ³ TWA	3 mg/m ³ TWA	None.
Paraffin wax (Fume)	8002-74-2	None.	2 mg/m ³ TWA	None.
Titanium dioxide	13463-67-7	15 mg/m ³ TWA	10 mg/m ³ TWA	None.
Silicon Dioxide (amorphous)	7631-86-9	20mppcf 80(mg/m ³)/%SiO ₂	None.	None.
Copper	7440-50-8	1 mg/m ³ TWA	1 mg/m ³ TWA	None.

Environmental Exposure Controls:

Ventilation:

Personal Protection:

Not normally required.

Good general ventilation should be sufficient under normal use.

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: Goggles. Skin: Protective gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

pH (Value): Form: Color: Odor: Boiling Point (°C): Melting Point (°C): Vapor Pressure (Pascal): Viscosity (mPa.s): Flash Point (°C): Flammable Limits (Upper) (%v/v): Flammable Limits (Lower) (%v/v): **Explosive Properties: Specific Gravity:** Vapor Density (Air=1): Partition Coefficient (n-Octanol/water): Relative Evaporation Rate (Butyl Acetate=1): Not applicable. **Oxidizing Properties:** Solubility (Water): Solubility (Other):

Not applicable. Film. Black. White. Red. Blue or Gold. Odorless. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. No data. No data. No data. No data. Not applicable. No data. No data. Negligible. No data.



TZe cassette ribbon, TZ cassette ribbon

Product Name

SAFETY DATA SHEET

10. STABILITY AND RECTIVITY

(Please refer to PSIS to find the applicable models.)

Chemical Stability:	Stable.
Conditions to avoid:	Keep away from heat. Avoid friction, sparks, or other means of ignition.
Materials to avoid:	Strong oxidizing agents.
Hazardous Decomposition Product(s):	Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.

11. TOXICOLOGICAL INFORMATION

Ingestion:	No data.
Inhalation:	No data.
Skin Contact:	No data.
Eye Contact:	No data.
Mutagenicity:	No data.
Skin sensitization:	No data.
Prink Inks:	Not-classified Human Carcinogen IARC Classification: Group 3.
Carbon Black:	Carcinogenicity Information. In 1996, the IARC reevaluated 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.

12. ECOLOGICAL INFORMATION

No data available on the adverse effects of this product on the environment.

Toxicity:No data.Environmental Fate and Distribution:No data.

Persistence and Degradation: No data.

13. DISPOSAL CONSIDERARIONS

Dispose of in compliance with Federal, State and local regulations.



TZe cassette ribbon, TZ cassette ribbon

SAFETY DATA SHEET

Version number: 3 SDS No. 5VA926-M1-EUUSOTHER

14. TRANSPORT INFORMATION

(Please refer to PSIS to find the applicable models.)

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

UN No.:

Class:

Product Name

None.

5:

15.	REGULATORY INFORMATION
USA:	All chemicals in this product comply with TSCA rules and regulations including TSCA Section 5 (Inventory Rules).
EU:	Not classified as dangerous for supply/use. (1999/45/EC, 67/548/EEC) Hazard Symbol, Risk Phrases, Safety Phrases: None assigned.
Canada:	WHMIS: Not applicable. (Manufactured article)

16. OTHER INFORMATION

The following sections contain revisions or new statements: Section 1, 3 and 8

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).
Reference:	 U.S. 29CFR Part 1910 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices EU Directive 91/322/EEC and 2000/39/EC IARC Monographs on the Evaluation Carcinogenic Risks to Humans World Health Organization NTP 11th Report on Carcinogens
Abbreviations:	ACGIH: American Conference of Governmental Industrial Hygienists ADR: European Agreement concerning the International carriage of Dangerous goods by Road (EU) DOT: Department Of Transportation (US) EINECS: European Inventory of Existing Commercial Chemical Substances HCS: Hazard Communication Standard (US) IARC: International Agency for Research on Cancer IATA: International Agency for Research on Cancer IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods IOELV: Indicative Occupational Exposure Limit Value NOHSC: National Occupational Health and Safety Commission (Australia) NTP: National Toxicology Program (US) OSHA: Occupational Safety and Health Administration (US) PEL: Permissible Exposure Limit RID: Regulations concerning the International carriage of goods by Rail (EU) TLV: Threshold Limit Value (ACGIH) TSCA: Toxic Substances Control Act (US) WHMIS: Workplace Hazardous Material Information System (Canada)



TZe Fabric cassette tape, TZ Fabric cassette tape (Please refer to PSIS to find the applicable models.)

Product Name

SAFETY DATA SHEET

Version number: 2 SDS No. 5VA926-M3-EUUSOTHER

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name:	TZe Fabric cassette tape, TZ Fabric cassette tape
Use:	These products are tapes for Brother Industries, Ltd. TZe Fabric cassette or TZ Fabric cassette tape.
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 100 Somerset Corporate Boulevard, P.O. Box 6911, Bridgewater, NJ 08807-0911, 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
Emergency Phone No.:	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
E-mail address for information:	sds.info@brother.co.jp

2. HAZARDS IDENTIFICATION

Potential Health Effects:	Inhalation: No specific effects and/or symptoms have been reported or known.
	Skin Contact: No specific effects and/or symptoms have been reported or known.
	Eye Contact: No specific effects and/or symptoms have been reported or known.
	Ingestion: No specific effects and/or symptoms have been reported or known.
EU Classification:	Not classified as hazardous according to EU Directive 1999/45/EC.
Australia Classification:	Not classified as hazardous according to the criteria of NOHSC.



Version number: 2 SDS No. 5VA926-M3-EUUSOTHER

Product Name

TZe Fabric cassette tape, TZ Fabric cassette tape (Please refer to PSIS to find the applicable models.)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name:

TZe Fabric cassette tape (Article), TZ Fabric cassette tape (Article)

Chemical Name	CAS No.	EC No.	%W/W	EU Hazard Symbols	EU Risk Phrases
Polyethylene terephthalate	Confidential	Confidential	-	Not classified.	Not classified.
Polyolefin resin	Confidential	Confidential	-	Not classified.	Not classified.
Copolyester	Confidential	Confidential	-	Not classified.	Not classified.

4. FIRST AID MEASURES

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 200-300 ml (half a pint) of water to drink.

Extinguishing Media:	Extinguish preferably with dry chemical, Carbon dioxide, Water, Foam.
Unsuitable Extinguishing Media:	None.
Special firefighting procedures:	A self contained breathing apparatus and suitable protective clothing should be worn in fire conditions.
Unusual fire and explosion hazards:	No data.

6. ACCIDENTAL RELEASE MEASURES

Personal Protection:	Not normally required. See Section: 8
Environmental Precautions:	Avoid release to the environment
Methods for Cleaning Up:	Not applicable.

7. HANDLING AND STORAGE

Handling:

No special requirements.

Storage:

Keep away from oxidizing agents.



Version number: 2 SDS No. 5VA926-M3-EUUSOTHER

EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

Occupational Exposure Limits:	None assigned.
Environmental Exposure Controls:	Not normally required.
Ventilation:	Good general ventilation should be sufficient under normal use.
Personal Protection:	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: Goggles. Skin: Protective gloves.

PHYSICAL AND CHEMICAL PROPERTIES 9.

pH (Value): Form: Color: Odor: Boiling Point (°C): Melting Point (°C): Vapor Pressure (Pascal): Viscosity (mPa.s): Flash Point (°C): Flammable Limits (Upper) (%v/v): Flammable Limits (Lower) (%v/v): **Explosive Properties:** Specific Gravity: Vapor Density (Air=1): Partition Coefficient (n-Octanol/water): Relative Evaporation Rate (Butyl Acetate=1): Not applicable. Oxidizing Properties: Solubility (Water): Solubility (Other):

Not applicable. Tape rolled. White, Blue, Yellow, Pink. Odorless. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. No data. No data. No data. No data. Not applicable. No data. No data. Insoluble. No data.

STABILITY AND RECTIVITY 10.

Chemical Stability:	Stable.
Conditions to avoid:	Keep away from heat. Avoid friction, sparks, or other means of ignition.
Materials to avoid:	Strong oxidizing agents.
Hazardous Decomposition Product(s):	Contains: Carbon monoxide, Carbon dioxide and Nitrogen oxides.

Product Name TZe Fabric cassette tape, TZ Fabric cassette tape (Please refer to PSIS to find the applicable models.)



Version number: 2 SDS No. 5VA926-M3-EUUSOTHER

Product Name
TZe Fabric cassette tape, TZ Fabric cassette tape
(Please refer to PSIS to find the applicable models.)

11. TOXICOLOGICAL INF	FORMATION
Ingestion:	No data.
Inhalation:	No data.
Skin Contact:	No data.
Eye Contact:	No data.
Mutagenicity:	No data.
Skin sensitization:	No data.

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

12. **ECOLOGICAL INFORMATION**

No data available on the adverse effects of this product on the environment.

Toxicity:	No data.
Environmental Fate and Distribution:	No data.
Persistence and Degradation:	No data.

DISPOSAL CONSIDERARIONS 13.

Dispose of in compliance with Federal, State and local regulations.

TRANSPORT INFORMATION 14.

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

None.

UN No.: None.

Class:

15.

REGULATORY INFORMATION

All chemicals in this product comply with TSCA rules and regulations including TSCA Section 5 (Inventory Rules).

Not classified as dangerous for supply/use. (1999/45/EC, 67/548/EEC) Hazard Symbol, Risk Phrases, Safety Phrases: None assigned.

WHMIS: Not applicable. (Manufactured article)

EU:

USA:

Canada:



Version number: 2 SDS No. 5VA926-M3-EUUSOTHER

Product Name

TZe Fabric cassette tape, TZ Fabric cassette tape (Please refer to PSIS to find the applicable models.)

16. OTHER INFORMATION

The following sections contain revisions or new statements: Section 1 and 3.

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).
Reference:	 U.S. 29CFR Part 1910 ACGIH Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices EU Directive 91/322/EEC and 2000/39/EC IARC Monographs on the Evaluation Carcinogenic Risks to Humans World Health Organization NTP 11th Report on Carcinogens
Abbreviations:	ACGIH: American Conference of Governmental Industrial Hygienists ADR: European Agreement concerning the International carriage of Dangerous goods by Road (EU) DOT: Department Of Transportation (US) EINECS: European Inventory of Existing Commercial Chemical Substances HCS: Hazard Communication Standard (US) IARC: International Agency for Research on Cancer IATA: International Agency for Research on Cancer IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods IOELV: Indicative Occupational Exposure Limit Value NOHSC: National Occupational Health and Safety Commission (Australia) NTP: National Toxicology Program (US) OSHA: Occupational Safety and Health Administration (US) PEL: Permissible Exposure Limit RID: Regulations concerning the International carriage of goods by Rail (EU) TLV: Threshold Limit Value (ACGIH) TSCA: Toxic Substances Control Act (US) WHMIS: Workplace Hazardous Material Information System (Canada)