SAFETY DATA SHEET

Revision Date: 28-Jul-2020
Issuing Date: 08-Nov-2010
Revision Number: 8
Safety data sheet number: 5VA926-M1-1

Product Name: TZe cassette r bbon, TZ cassette ribbon (Black)

1. IDENTIFICATION

Product identifier

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

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

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use These products are ink ribbons for TZe / TZ cassette manufactured by Brother Industries, Ltd.

Uses advised against No information available

Details of the supplier of the safety data sheet

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

Supplier Address Brother International Corporation
200 Crossing Boulevard, Bridgewater, NJ 08807, USA
Telephone (for information): +1-877-276-8437

Emergency telephone number

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

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Hazards not otherwise classified (HNOC)
Not applicable

Label elements

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance
Physical state film **Odor:** Slight wax odor

Other Information

Unknown acute toxicity
100 % of the mixture consists of ingredient(s) of unknown toxicity
81 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
81 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Paraffin wax	8002-74-2	<=10	-
Carbon Black	1333-86-4	2-9	*
Wax	**	**	-
Resin	**	**	-
Polyethylene terephthalate film	**	**	-
Organic filler	**	**	*
Additive	**	**	-

*The exact percentage (concentration) of composition has been withheld as a trade secret.

** Trade secret

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Inhalation Not applicable.

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

Skin contact: Wash off immediately with soap and plenty of water.

Ingestion Obtain immediate medical attention. Wash out mouth with water and give 100-200 ml of water to drink.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical, CO_2, water spray or regular foam

Unsuitable extinguishing media None.

Specific hazards arising from the chemical No information available

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters Wear self-contained breathing apparatus and protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Not normally required.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Avoid release to the environment

Methods and material for containment and cleaning up

Methods for containment Not applicable.

Methods for cleaning up Not applicable

Prevention of secondary hazards Not applicable.

Reference to other sections See section 8 for more information. See section 13 for more information.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Avoid contact with skin and eyes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep away from oxidizing agents.

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

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Paraffin wax 8002-74-2	TWA: 2 mg/m^3 fume	(vacated) TWA: 2 mg/m^3	TWA: 2 mg/m^3 fume
Carbon Black 1333-86-4	TWA: 3 mg/m^3 inhalable particulate matter	TWA: 3.5 mg/m^3 (vacated) TWA: 3.5 mg/m^3	IDLH: 1750 mg/m^3 TWA: 3.5 mg/m^3 TWA: 0.1 mg/m^3 Carbon black in presence of Polycyclic aromatic hydrocarbons PAH

Appropriate engineering controls

Engineering controls Good general ventilation should be sufficient under normal use.

Individual protection measures, such as personal protective equipment

Eye/face protection If there is a risk of contact:. Safety goggles.

Hand protection If there is a risk of contact:. Protective gloves.

Skin and body protection Not normally required.

Respiratory protection No special protective equipment required.

Environmental exposure controls Not normally required.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	
Physical state	film
Color	black
Odor	Slight wax odor
Odor threshold	No information available

Property	Values	Remarks • Method
pH	Not applicable	
Melting point / freezing point	Not applicable	
Boiling point / boiling range	Not applicable	
Flash point	No information available	
Evaporation rate	No data available	
Flammability (solid, gas)	No data available	
Flammability Limit in Air		None known
Upper flammability limit:	No data available	
Lower flammability limit:	No data available	
Vapor pressure	Not applicable	
Vapor density	Not applicable	
Relative density	No data available	
Water solubility	negligible	
Solubility(ies)	No information available	
Partition coefficient	No data available	
Autoignition temperature	No information available	
Decomposition temperature	Not determined	
Kinematic viscosity	No data available	
Dynamic viscosity	No data available	
Explosive properties	No information available	No information available.
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	No information available.
Conditions to avoid	Keep away from heat. Avoid friction, sparks, or other means of ignition.

Incompatible materials Strong oxidizing agents

Hazardous decomposition products Carbon dioxide (CO_2), Carbon monoxide, Nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

Product Information

Inhalation No information available

Eye contact No information available

Skin contact: No information available

Ingestion No information available

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 7,359.10 mg/kg
ATEmix (dermal) 3,291.80 mg/kg

Skin corrosion/irritation No information available

Serious eye damage/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)

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

12. ECOLOGICAL INFORMATION

Ecotoxicity .

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Carbon Black 1333-86-4	-	1000:96 h Brachydanio rerio mg/L LC50	-	5600: 24 h Daphnia magna mg/L EC50

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Dispose in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO (air) Not regulated

IATA Not regulated

IMDG Not regulated

RID Not regulated

ADR Not regulated

ADN Not regulated

15. REGULATORY INFORMATION

International Inventories
TSCA Complies
DSL/NDSL Complies

EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Right-to-Know Regulations

US State Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Paraffin wax 8002-74-2	X	X	X
Carbon Black 1333-86-4	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

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

TZe-111	TZe-121	TZe-131	TZe-131S	TZe-141
TZe-151	TZe-161	TZe-211	TZe-221	TZe-231
TZe-231S	TZe-241	TZe-251	TZe-261	TZe-421
TZe-431	TZe-431S	TZe-441	TZe-451	TZe-461
TZe-521	TZe-531	TZe-541	TZe-551	TZe-561
TZe-611	TZe-621	TZe-631	TZe-631S	TZe-641
TZe-651	TZe-661	TZe-721	TZe-731	TZe-741
TZe-751	TZe-761	TZe-AF131	TZe-AF231	TZe-B31
TZe-B41	TZe-B51	TZe-B61	TZe-BA151	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-FX241	TZe-FX251	TZe-FX261
TZe-FX431	TZe-FX441	TZe-FX451	TZe-FX551	TZe-FX611
TZe-FX621	TZe-FX631	TZe-FX641	TZe-FX651	TZe-FX661
TZe-FX731	TZe-FX741	TZe-FX751	TZe-GB31	TZe-GW31
TZe-HC31	TZe-HP31	TZe-HW31	TZe-HY31	TZe-J231
TZe-J241	TZe-LG31	TZe-LP31	TZe-LW31	TZe-M231
TZe-M231S	TZe-M251	TZe-M261	TZe-M31	TZe-M31S
TZe-M51	TZe-M851	TZe-M921	TZe-M931	TZe-M941
TZe-M951	TZe-M961	TZe-MB31	TZe-MPGG31	TZe-MPMC31
TZe-MPPD31	TZe-MPPF31	TZe-MPPH31	TZe-MPRG31	TZe-MPSL31
TZe-MPTP31	TZe-MPYS31	TZe-MQ531	TZe-MQ551	TZe-MQ851
TZe-MQE31	TZe-MQE51	TZe-MQF31	TZe-MQF51	TZe-MQH51
TZe-MQH61	TZe-MT3107	TZe-MT3108	TZe-MT3115	TZe-MT3121
TZe-MT3122	TZe-MT3123	TZe-MV31	TZe-MW31	TZe-PG31
TZe-PR831	TZe-PR851	TZe-PW31	TZe-RY31	TZe-S121
TZe-S131	TZe-S141	TZe-S151	TZe-S211	TZe-S221
TZe-S231	TZe-S241	TZe-S251	TZe-S261	TZe-S621
TZe-S631	TZe-S641	TZe-S651	TZe-S661	TZe-S941
TZe-S951	TZe-S961	TZe-SE4	TZe-SE5	TZe-SG31
TZe-SL251	TZe-SL261	TZe-SL651	TZe-SL661	TZe-SM941
TZe-SM951	TZe-SM961	TZe-SW31	TZe-UB31	TZe-UP31
TZe-Z111	TZe-Z121	TZe-Z131	TZe-Z211	TZe-Z221
TZe-Z231	TZe-Z421	TZe-Z431	TZe-Z521	TZe-Z531
TZe-Z611	TZe-Z621	TZe-Z631	TZe-Z721	TZe-Z731
TZe-ZB31	TZe-ZC31	TZe-ZFX211	TZe-ZFX221	TZe-ZFX231
TZe-ZFX611	TZe-ZFX621	TZe-ZFX631	TZe-ZM931	TZe-ZS121
TZe-ZS131	TZe-ZS211	TZe-ZS221	TZe-ZS231	TZe-ZS621
TZe-ZS631				

TZ-111	TZ-111V	TZ-121	TZ-121V	TZ-122
TZ-123	TZ-131	TZ-131V	TZ-141	TZ-141V
TZ-151	TZ-151V	TZ-161	TZ-161V	TZ-211
TZ-211V	TZ-221	TZ-2212PK	TZ-221V	TZ-221V2
TZ-231	TZ-2312PK	TZ-231CIV	TZ-231S	TZ-231V
TZ-231V10	TZ-231V2	TZ-241	TZ-2413	TZ-241CIV

TZ-241V	TZ-251	TZ-251CIV	TZ-251V	TZ-251V10
TZ-261	TZ-261CIV	TZ-261V	TZ-31M3	TZ-31V3
TZ-31VA	TZ-411	TZ-421	TZ-431	TZ-431S
TZ-441	TZ-451	TZ-461	TZ-511	TZ-521
TZ-531	TZ-541	TZ-551	TZ-561	TZ-611
TZ-611V	TZ-621	TZ-621V	TZ-631	TZ-631V
TZ-641	TZ-641V	TZ-651	TZ-651V	TZ-661
TZ-661V	TZ-711	TZ-721	TZ-731	TZ-741
TZ-751	TZ-761	TZ-831	TZ-841	TZ-851
TZ-931	TZ-941	TZ-951	TZ-A31	TZ-A51
TZ-AF131	TZ-AF231	TZ-AFG31	TZ-AFW31	TZ-B21
TZ-B31	TZ-B41	TZ-B51	TZ-BA151	TZ-BW31
TZ-BY31	TZ-C21	TZ-C31	TZ-C41	TZ-C51
TZ-D21	TZ-D231	TZ-D241	TZ-D31	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-FX251	TZ-FX261	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-S111
TZ-S121	TZ-S131	TZ-S141	TZ-S151	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			

NFPA	**Health hazards**	0	**Flammability**	0	**Instability**	0	**Section 9: Physical and chemical properties** -
HMIS	**Health hazards**	0	**Flammability**	0	**Physical hazards**	0	**Personal protection** X

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

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet