SAFETY DATA SHEET

Revision Date: 28-Jul-2020
Issuing Date: 08-Nov-2010
Revision Number: 8
Safety data sheet number: 5VA926-M5-1

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

1. IDENTIFICATION

Product identifier

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

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
57 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
91 % 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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical name	CAS No	Weight-%	Trade secret
Titanium dioxide	13463-67-7	33-35	*
Paraffin wax	8002-74-2	7	-
Silicon Dioxide (amorphous)	7631-86-9	2	*
Wax	**	**	-
Resin	**	**	-
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
Titanium dioxide 13463-67-7	TWA: 10 mg/m^3	TWA: 15 mg/m^3 total dust (vacated) TWA: 10 mg/m^3 total dust	IDLH: 5000 mg/m^3
Paraffin wax 8002-74-2	TWA: 2 mg/m^3 fume	(vacated) TWA: 2 mg/m^3	TWA: 2 mg/m^3 fume
Silicon Dioxide (amorphous) 7631-86-9	No data available	(vacated) TWA: 6 mg/m^3 <1% Crystalline silica TWA: 20 mppcf : (80)/(% SiO2) mg/m^3 TWA	IDLH: 3000 mg/m^3 TWA: 6 mg/m^3

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	white
Odor	Slight wax odor
Odor threshold	No information available

Property	Values	Remarks • Method
pH	Not applicable	None known
Melting point / freezing point	Not applicable	None known
Boiling point / boiling range	Not applicable	None known
Flash point	No data available	None known
Evaporation rate	No information available	None known
Flammability (solid, gas)	No information available	None known
Flammability Limit in Air		None known
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	Not applicable	None known
Vapor density	Not applicable	None known
Relative density	No information available	None known
Water solubility	negligible	
Solubility(ies)	No information available	
Partition coefficient	No information available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No information available	
Kinematic viscosity	Not applicable	None known
Dynamic viscosity	Not applicable	None known
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 monoxide, Carbon dioxide (CO_2), 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) 8,277.50 mg/kg
ATEmix (dermal) 3,059.70 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)

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

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
Silicon Dioxide (amorphous) 7631-86-9	440: 72 h Pseudokirchneriella subcapitata mg/L EC50	5000: 96 h Brachydanio rerio mg/L LC50 static	-	7600: 48 h Ceriodaphnia dubia 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	Yes
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
Titanium dioxide 13463-67-7	X	X	X
Paraffin wax 8002-74-2	X	X	X
Silicon Dioxide (amorphous) 7631-86-9	-	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-135	TZe-145	TZe-315	TZe-325	TZe-335
TZe-345	TZe-355	TZe-365	TZe-435	TZe-465
TZe-525	TZe-535	TZe-545	TZe-555	TZe-565

TZe-725	TZe-735	TZe-755	TZe-765	TZe-BA155
TZe-M35	TZe-M355	TZe-M365	TZE-M65	TZe-ML35
TZe-ML55	TZe-MQ355	TZE-MQ365	TZe-MQ835	TZe-MQ835S
TZe-MQ855	TZe-MQG35	TZe-MQG55	TZe-MQL35	TZe-MQL55
TZe-MQP35	TZe-MQP35S	TZe-MQP55	TZe-MR35	TZe-MT3501
TZe-MT3505	TZe-PR935	TZe-PR955	TZe-S135	TZe-Z135
TZe-Z325	TZe-Z335	TZe-Z435	TZe-Z535	TZe-Z735

TZ-125	TZ-135	TZ-145	TZ-155	TZ-165
TZ-315	TZ-325	TZ-335	TZ-345	TZ-355
TZ-365	TZ-435	TZ-455	TZ-535	TZ-545
TZ-555	TZ-635	TZ-655	TZ-735	TZ-755
TZ-A25	TZ-BA155	TZ-MQ835	TZ-MQG35	TZ-MQL35
TZ-MQP35	TZ-Q35V3	TZ-S135	TZ-S145	TZ-S155

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

Issuing Date 08-Nov-2010

Revision Date 28-Jul-2020

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 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).

End of Safety Data Sheet