

Safety Data Sheet

Version OSHA-1.0
Date of issue : 2018-07-26
Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Black)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
TEL : +81-3-3268-1193
FAX : +81-3-3268-1197

1.4 - Emergency telephone number

•Manufacture : +81-3-3268-1193
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.
(Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 2.4% of the mixture consists of ingredient(s) of unknown acute toxicity.
Unknown Acute Dermal Toxicity: 34.1% of the mixture consists of ingredient(s) of unknown acute toxicity.
Unknown Acute Inhalation: vapour Toxicity: 64.4% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Category 1 (respiratory organs, nerve center, heart, kidney)
Specific target organ toxicity (Repeated exposure)	Category 1 (respiratory organ, nerve center, heart)
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Not classified
Hazardous to the aquatic environment (chronic)	Not classified

Hazard(s) not otherwise classified (HNOC)
 None known.

2.2 Label elements

Pictograms or Symbol

Exclamation mark

Health Hazard



Signal Word

Danger

Hazard statement

- Causes serious eye irritation
- May cause an allergic skin reaction
- Suspected of causing cancer
- May damage fertility or the unborn child
- Causes damage to organs (respiratory organs, nerve center, heart, kidney)
- Causes damage to organs through prolonged or repeated exposure (respiratory organ, nerve center, heart)

Precautionary Statements

Prevention

- Read label and Material Safety Data Sheet before use.
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Do not breathe dust/vapours
- Do not eat, drink or smoke when using this product
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/eye protection.
- Wash hand thoroughly after handling
- Avoid release to the environment

Response

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention
- IF exposed or concerned: Get medical advice/attention
- Get Medical advice/attention if you feel unwell
- Take off contaminated clothing and wash it before reuse.

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients

3.1 Substance : Not applicable

3.2 Mixture

Component and Amount

Component	Amount	CAS No.
Pigments	1-5%	Nondisclosure
Resins	0-5%	Nondisclosure
Water	50-55%	7732-18-5
Glycerol	25-35%	56-81-5
Additives	10-15%	Nondisclosure

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures

4.1 Description of First-aid measures

After inhalation:

Call a doctor/physician if you feel unwell.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

IF ON SKIN: Wash with soap and water
If skin irritation or a rash occurs: Get medical advice/attention
Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Take off contaminated clothing and wash it before reuse.

After eye contact:

Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
If eye irritation persists : Get medical advice/attention

After ingestion:

Call a doctor/physician if you feel unwell.

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

Therer is no specific and immedate treatment, but should consult a doctor.

5. Fire-fighting measures

Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

Prohibition extinguishing media for safety reason

Water spray (straight)

Specific hazards

This product is not combustible.But evaporated residue is combustible.
May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.
If can't move the container , cool containers and surrounding with spray water.
Cool containers with large quantities of water until well after extinguished the fire.
Special protective equipment for fire-fighters
Fire-fighting should be performed from the windward side.
Respiratory protection, and other suitable protective equipment

6. Accidental release measures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.
Do not walk through the leakage.
Keep sufficient ventilation if the area is indoor.
Remove ignition sources.

Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.
 Handle container with care, do not make it turn over, drop, give impact and drag.
 Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3	10mg/m3 (mist, TWA, 2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat, drink or smoke when using this product.
 Wash thoroughly after handling.

9. Physical and chemical properties

Appearance	Black Liquid
Odour	Slightly smell
Odour threshold	No data available
pH	8-9
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	
Flash point	
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water.
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Other information	
No data available	

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation : vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Category 1 (respiratory organs, nerve center, heart, kindney)
Specific target organ toxicity(Repeated exposure)	Category 1 (respiratory organ, nerve center, heart)
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations

Waste treatment methods	
Waste residues	

Disposal must be made according to official regulations.
Avoid release to the environment.

Contaminated container and packaging

Do not flush into the sewer.
Remove all contents when you dispose of empty containers.

14. Transport information**14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA (Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID (Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading.
Avoid acute vibration and friction for container.
If there are some indications of hazard in transporting like acute leak in transporting,
take emergency measures and report the accident at once to disaster management agency.
Avoid transport with foods or feeds.
Above regulations are not applied to transport of writing instruments filled with the ink.
Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.
They cannot be always applicable to general use of writing instruments.

Revision

2018/7/26 First version

Safety Data Sheet

Version OSHA-1.0
 Date of issue : 2019-04-11
 Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Blue Green)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
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1.4 - Emergency telephone number

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 (Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

<u>Unknown Acute Oral Toxicity:</u>	40% of the mixture consists of ingredient(s) of unknown acute toxicity.
<u>Unknown Acute Dermal Toxicity:</u>	41% of the mixture consists of ingredient(s) of unknown acute toxicity.
<u>Unknown Acute Inhalation: vapour Toxicity:</u>	68% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

Hazard(s) not otherwise classified (HNOC)

None known.

2.2 Label elements**Pictograms or Symbol**

Exclamation mark

**Signal Word**

Warning

Hazard statement

- May cause an allergic skin reaction
- Causes serious eye irritation

Precautionary Statements**Prevention**

- Avoid breathing dust/fume/gas/mist/vapours/spray
- Wash hands thoroughly after handling
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection

Response

- IF IN EYES: Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- If eye irritation persists : Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients**3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Pigments	-1%	Trade Secret
Resins	15-20%	Trade Secret
Water	50-55%	7732-18-5
Glycerol	20-25%	56-81-5
Additives	5-10%	Trade Secret

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures**4.1 Description of First-aid measures****After inhalation:**

- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
- Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

- Call a doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse.

After eye contact:

IF IN EYES: Rinse continuously with water for several minutes.

Remove contact lenses if present and easy to do . Continue rinsing

If eye irritation persists : Get medical advice/attention

After ingestion:

Call a POISON CENTER or doctor/physician if you feel unwell

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

Therer is no specific and immedate treatment, but should consult a doctor.

5. Fire-fighting measures

5.1 Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

5.2 Special hazards arising from the substance or mixture

Prohibition extinguishing media for safety reason

Water spray (straight)

5.3 Advice for firefighters

Specific hazards

This product is not combustible. But evaporated residue is combustible.

May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water.

Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

6.2 Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

6.4 Reference to other sections

Refer to section 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.
 Handle container with care, do not make it turn over, drop, give impact and drag.
 Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3	10mg/m3(mist,TWA,2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat ,drink or smoke when using this product.
 Wash thoroughly after handling.

9. Physical and chemical properties

Appearance	Blue green Liquid
Odour	A little peculiar odour
Odour threshold	No data available
pH	7.6~8.6
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Other information	No data available

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations

Waste treatment methods

Waste residues

Disposal must be made according to official regulations.
 Avoid release to the environment.

Contaminated container and packaging

Do not flush into the sewer.
 Remove all contents when you dispose of empty containers.

14. Transport information

14.1 Un number

14.2 UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packaging group

International regulation

IMDG (Maritime transport)

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA (Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID (Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute) Not classified
 Hazardous to the aquatic environment(chronic) Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading.
 Avoid acute vibration and friction for container.
 If there are some indications of hazard in transporting like acute leak in transporting,
 take emergency measures and report the accident at once to disaster management agency.
 Avoid transport with foods or feeds.
 Above regulations are not applied to transport of writing instruments filled with the ink.
 Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.
But this shall not constitute a guarantee for any specific or classification.
Please be alert to handling this product because chemicals shall have unknown hazards.
This sheet may be revised when we get new information.
The information is assumed in the case of large-scale handling on business operations.
They cannot be always applicable to general use of writing instruments.

Revision

2019/4/11 First version

Safety Data Sheet

Version OSHA-1.0
Date of issue : 2018-11-14
Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Light Blue)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
TEL : +81-3-3268-1193
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(Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

<u>Unknown Acute Oral Toxicity:</u>	36% of the mixture consists of ingredient(s) of unknown acute toxicity
<u>Unknown Acute Dermal Toxicity:</u>	37% of the mixture consists of ingredient(s) of unknown acute toxicity
<u>Unknown Acute Inhalation: vapour Toxicity:</u>	64% of the mixture consists of ingredient(s) of unknown acute toxicity

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Not classified
Hazardous to the aquatic environment (chronic)	Not classified

Hazard(s) not otherwise classified (HNOC)

None known.

2.2 Label elements

Pictograms or Symbol

Exclamation mark



Signal Word

WARNING

Hazard statement

- Causes serious eye irritation
- May cause an allergic skin reaction

Precautionary Statements

Prevention

- Wash hands thoroughly after handling
- Avoid breathing dust/fume/gas/mist/vapours/spray
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection

Response

- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
- If eye irritation persists : Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- Store in a well ventilated place. Keep cool and container tightly closed.

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients

3.1 Substance : Not applicable

3.2 Mixture

Component and Amount

Component	Amount	CAS No.
Pigments	0-1%	Trade Secret
Resins	15-20%	Trade Secret
Water	50-55%	7732-18-5
Glycerol	20-30%	56-81-5
Additives	5-10%	Trade Secret

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures

4.1 Description of First-aid measures

After inhalation:

- Call a doctor/physician if you feel unwell.
- Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

- Call a doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

After eye contact:

- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to dc
- If eye irritation persists : Get medical advice/attention

After ingestion:

Call a doctor/physician if you feel unwell

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

There is no specific and immediate treatment, but should consult a doctor.

5. Fire-fighting measures

5.1 Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

5.2 Special hazards arising from the substance or mixture

Prohibition extinguishing media for safety reason

Water spray (straight)

5.3 Advice for firefighters

Specific hazards

This product is not combustible. But evaporated residue is combustible.

May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.

If can't move the container, cool containers and surrounding with spray water.

Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

6.2 Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

6.4 Reference to other sections

Refer to section 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.
 Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3	10mg/m3(mist,TWA,2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat ,drink or smoke when using this product.
 Wash thoroughly after handling.

9. Physical and chemical properties

Appearance	Light blue Liquid
Odour	A little peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available

Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	This ink is soluble in water.
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Other information	
No data available	

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations

Waste treatment methods	
Waste residues	Disposal must be made according to official regulations. Avoid release to the environment.
Contaminated container and packaging	Do not flush into the sewer. Remove all contents when you dispose of empty containers.

14. Transport information

- 14.1 Un number
- 14.2 UN proper shipping name
- 14.3 Transport hazard class(es)

14.4 Packaging group**International regulation**

IMDG (Maritime transport)

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA (Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID (Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading.
Avoid acute vibration and friction for container.
If there are some indications of hazard in transporting like acute leak in transporting,
take emergency measures and report the accident at once to disaster management agency.
Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.
Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

Revision

2018/11/14 First version

Safety Data Sheet

Version OSHA-1.0
Date of issue : 2019-04-11
Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Light Pink)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
TEL : +81-3-3268-1193
FAX : +81-3-3268-1197

1.4 - Emergency telephone number

•Manufacture : +81-3-3268-1193
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.
(Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 40% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 41% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 68% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Not classified
Hazardous to the aquatic environment (chronic)	Not classified

Hazard(s) not otherwise classified (HNOC)

None known.

2.2 Label elements**Pictograms or Symbol**

Exclamation mark

**Signal Word**

Warning

Hazard statement

- May cause an allergic skin reaction
- Causes serious eye irritation

Precautionary Statements**Prevention**

- Avoid breathing dust/fume/gas/mist/vapours/spray
- Wash hands thoroughly after handling
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection

Response

- IF IN EYES: Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- If eye irritation persists : Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients**3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Pigments	1-5%	Trade Secret
Resins	15-20%	Trade Secret
Water	45-50%	7732-18-5
Glycerol	20-25%	56-81-5
Additives	5-10%	Trade Secret

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures**4.1 Description of First-aid measures****After inhalation:**

- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell
- Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

- Call a doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse.

After eye contact:

IF IN EYES: Rinse continuously with water for several minutes.

Remove contact lenses if present and easy to do . Continue rinsing

If eye irritation persists : Get medical advice/attention

After ingestion:

Call a POISON CENTER or doctor/physician if you feel unwell

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

Therer is no specific and immedate treatment, but should consult a doctor.

5. Fire-fighting measures

5.1 Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

5.2 Special hazards arising from the substance or mixture

Prohibition extinguishing media for safety reason

Water spray (straight)

5.3 Advice for firefighters

Specific hazards

This product is not combustible.But evaporated residue is combustible.

May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water.

Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

6.2 Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

6.4 Reference to other sections

Refer to section 8 and 13.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.
 Handle container with care, do not make it turn over, drop, give impact and drag.
 Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3	10mg/m3(mist,TWA,2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat ,drink or smoke when using this product.
 Wash thoroughly after handling.

9. Physical and chemical properties

Appearance	Pink Liquid
Odour	A little peculiar odour
Odour threshold	No data available
pH	7.6~8.6
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Other information	No data available

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation:vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations**Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.
Avoid release to the environment.

Contaminated container and packaging

Do not flush into the sewer.
Remove all contents when you dispose of empty containers.

14. Transport information**14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA (Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID (Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading.
Avoid acute vibration and friction for container.
If there are some indications of hazard in transporting like acute leak in transporting,
take emergency measures and report the accident at once to disaster management agency.
Avoid transport with foods or feeds.
Above regulations are not applied to transport of writing instruments filled with the ink.
Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.
But this shall not constitute a guarantee for any specific or classification.
Please be alert to handling this product because chemicals shall have unknown hazards.
This sheet may be revised when we get new information.
The information is assumed in the case of large-scale handling on business operations.
They cannot be always applicable to general use of writing instruments.

Revision

2019/4/11 First version

Safety Data Sheet

Version OSHA-1.0
Date of issue : 2018-08-22
Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Magenta)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
TEL : +81-3-3268-1193
FAX : +81-3-3268-1197

1.4 - Emergency telephone number

•Manufacture : +81-3-3268-1193
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.
(Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 0.7% of the mixture consists of ingredient(s) of unknown acute toxicity.
Unknown Acute Dermal Toxicity: 53.6% of the mixture consists of ingredient(s) of unknown acute toxicity.
Unknown Acute Inhalation: vapour Toxicity: 77.1% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Category 2
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Category 1 (respiratory organs, nerve center, heart, kidney)
Specific target organ toxicity (Repeated exposure)	Category 1 (respiratory organs, nerve center, heart)
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Category 3

Hazard(s) not otherwise classified (HNOC)

None known.

2.2 Label elements**Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

Hazard statement

- Causes skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation
- May damage fertility or the unborn child
- Causes damage to organs (respiratory organs, nerve center, heart, kidney)
- Causes damage to organs through prolonged or repeated exposure (respiratory organs, nerve center, heart)
- Harmful to aquatic life
- Harmful to aquatic life with long lasting effects

Precautionary Statements**Prevention**

- Read label and Material Safety Data Sheet before use.
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Do not breathe dust/vapours
- Do not eat, drink or smoke when using this product
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/eye protection.
- Wash hand thoroughly after handling
- Avoid release to the environment

Response

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
- If eye irritation persists: Get medical advice/attention
- Get Medical advice/attention if you feel unwell
- IF exposed or concerned: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients**3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Pigments	1-5%	Trade Secret
Ethylene glycol	1-5%	107-21-1
Glycerol	20-30%	56-81-5
Water	50-60%	7732-18-5
Additives	10-20%	Trade Secret

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures

4.1 Description of First-aid measures

After inhalation:

Call a doctor/physician if you feel unwell.
Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

Wash with soap and water
If skin irritation or a rash occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse.
Call a POISON CENTER or doctor/physician if you feel unwell

After eye contact:

Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
If eye irritation persists : Get medical advice/attention

After ingestion:

Call a doctor/physician if you feel unwell.

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

Therer is no specific and immedate treatment, but should consult a doctor.

5. Fire-fighting measures

Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

Prohibition extinguishing media for safety reason

Water spray (straight)

Specific hazards

This product is not combustible. But evaporated residue is combustible.
May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.
If can't move the container , cool containers and surrounding with spray water.
Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.
Respiratory protection, and other suitable protective equipment

6. Accidental release measures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.
Do not walk through the leakage.
Keep sufficient ventilation if the area is indoor.
Remove ignition sources.

Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.
Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.
 Handle container with care, do not make it turn over, drop, give impact and drag.
 Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Ethylene glycol	Not established	100mg/m3(aerosol, TLV-C(STEL), 2009)
Triethanolamine	Not established	5mg/m3 (TWA, 2009)
Glycerol	Not established	10mg/m3 (mist, TWA, 2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling.

9.Physical and chemical properties

Appearance	Red Liquid
Odour	Slightly smell
Odour threshold	No data available
pH	8-9
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	This ink is soluble in water.
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

Other information

No data available

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation:vapour	Classification not possible
Skin corrosion / irritation	Category 2
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Category 1 (respiratory organs,nerve center,heart,kindney)
Specific target organ toxicity(Repeated exposure)	Category 1 (respiratory organs,nerve center,heart)
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Category 3
Degradability	No data is available

Bioaccumulative potential No data is available
Mobility in soil No data is available

13. Disposal considerations

Waste treatment methods

Waste residues

Disposal must be made according to official regulations.
Avoid release to the environment.

Contaminated container and packaging

Do not flush into the sewer.
Remove all contents when you dispose of empty containers.

14. Transport information

14.1 Un number

14.2 UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packaging group

International regulation

IMDG (Maritime transport)

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA (Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID (Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading.
Avoid acute vibration and friction for container.
If there are some indications of hazard in transporting like acute leak in transporting, take emergency measures and report the accident at once to disaster management agency.
Avoid transport with foods or feeds.
Above regulations are not applied to transport of writing instruments filled with the ink.
Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

Revision

2018/8/22 First version

Safety Data Sheet

Version OSHA-1.0
Date of issue : 2019-04-11
Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Pale Blue)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
TEL : +81-3-3268-1193
FAX : +81-3-3268-1197

1.4 - Emergency telephone number

•Manufacture : +81-3-3268-1193
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.
(Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 35% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 36% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 63% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Not classified

Environmental hazards

Hazardous to the aquatic environment (acute)	Not classified
Hazardous to the aquatic environment (chronic)	Not classified

Hazard(s) not otherwise classified (HNOC)

None known.

2.2 Label elements**Pictograms or Symbol**

Exclamation mark

**Signal Word**

Warning

Hazard statement

- May cause an allergic skin reaction
- Causes serious eye irritation

Precautionary Statements**Prevention**

- Avoid breathing dust/vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection

Response

- IF ON SKIN: Wash with soap and water
- IF IN EYES: Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do. Continue rinsing
- If skin irritation or a rash occurs: Get medical advice/attention
- If eye irritation persists: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

Storage**Disposal****3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Pigments	0-1%	Trade Secret
Pigment dispersion	1-10%	Trade Secret
Resins	10-15%	Trade Secret
Water	50-55%	7732-18-5
Glycerol	20-25%	56-81-5
Additives	5-10%	Trade Secret
Triethanolamine	0-1%	102-71-6

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures**4.1 Description of First-aid measures****After inhalation:**

Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

After skin contact:

IF ON SKIN: Wash with soap and water
Call a POISON CENTER or doctor/physician if you feel unwell
If skin irritation or a rash occurs: Get medical advice/attention

Take off contaminated clothing and wash it before reuse.

After eye contact:

Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
If eye irritation persists : Get medical advice/attention

After ingestion:

Call a POISON CENTER or doctor/physician if you feel unwell

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

There is no specific and immediate treatment, but should consult a doctor.

5. Fire-fighting measures

Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

Prohibition extinguishing media for safety reason

Water spray (straight)

Specific hazards

This product is not combustible. But evaporated residue is combustible.
May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.
If can't move the container , cool containers and surrounding with spray water.
Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.
Respiratory protection, and other suitable protective equipment

6. Accidental release measures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.
Do not walk through the leakage.
Keep sufficient ventilation if the area is indoor.
Remove ignition sources.

Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.
Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to
"8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to
"8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.
Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in a well-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	Not established	10mg/m3 (mist, TWA, 2009)
Triethanolamine	Not established	5mg/m3 (TWA, 2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat ,drink or smoke when using this product.
 Wash thoroughly after handling.

9.Physical and chemical properties

Appearance

Blue Liquid

Odour

Peculiar odour

Odour threshold

No data available

pH

No data available

Evaporation rate

No data available

Flammability

No data available

Melting point / Coagulating point

No data available

Boiling point

No data available

Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

Other information
No data available

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation :vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Not classified
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Not classified

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations

Waste treatment methods	
Waste residues	Disposal must be made according to official regulations. Avoid release to the environment.
Contaminated container and packaging	Do not flush into the sewer. Remove all contents when you dispose of empty containers.

14. Transport information**14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA (Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID (Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

Revision

2019/4/11 First version

Safety Data Sheet

Version OSHA-1.0
Date of issue : 2018-07-31
Revision Date :

1. Identification of the mixture and of the company

1.1- Product identifier

Product name : Ink for Sarasa Clip 0.5(Violet)

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

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

1.3 - Details of the supplier of the SDS

•Manufacture : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
TEL : +81-3-3268-1193
FAX : +81-3-3268-1197

1.4 - Emergency telephone number

•Manufacture : +81-3-3268-1193
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.
(Japan time)

2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

2.1 Classification of the substance or mixture

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 35% of the mixture consists of ingredient(s) of unknown acute toxicity.
Unknown Acute Dermal Toxicity: 36.15% of the mixture consists of ingredient(s) of unknown acute toxicity.
Unknown Acute Inhalation: vapour Toxicity: 63.15% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Not classified
Hazardous to the aquatic environment (chronic)	Not classified

Hazard(s) not otherwise classified (HNOC)

None known.

2.2 Label elements**Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

Hazard statement

- Causes serious eye irritation
- May cause an allergic skin reaction
- May damage fertility or the unborn child

Precautionary Statements**Prevention**

- Read label and Material Safety Data Sheet before use.
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid breathing dust/vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/eye protection.
- Wash hand thoroughly after handling
- Avoid release to the environment

Response

- IF ON SKIN: Wash with soap and water
- IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
- IF exposed or concerned: Get medical advice/attention
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients**3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Pigments	1-5%	Trade Secret
Resins	15-20%	Trade Secret
Water	50-55%	7732-18-5
Glycerol	20-25%	56-81-5
Additives	5-10%	Trade Secret
Triethanolamine	0-1%	102-71-6

Additional information

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

4. First-aid measures**4.1 Description of First-aid measures****After inhalation:**

Call a doctor/physician if you feel unwell.

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

Wash with soap and water
If skin irritation or a rash occurs: Get medical advice/attention
Call a doctor/physician if you feel unwell.
Take off contaminated clothing and wash it before reuse.

After eye contact:

Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
If eye irritation persists : Get medical advice/attention

After ingestion:

Call a doctor/physician if you feel unwell.

Protection of the person who takes first aid

Nothing in particular.

4.2 Most important symptoms and effects, both acute and delayed

No significant reaction of the human body to this product known.

4.3 Indication of any immediate medical attention and special treatment needed

There is no specific and immediate treatment, but should consult a doctor.

5. Fire-fighting measures

Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

Prohibition extinguishing media for safety reason

Water spray (straight)

Specific hazards

This product is not combustible. But evaporated residue is combustible.
May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.
If can't move the container , cool containers and surrounding with spray water.
Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.
Respiratory protection, and other suitable protective equipment

6. Accidental release measures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.
Do not walk through the leakage.
Keep sufficient ventilation if the area is indoor.
Remove ignition sources.

Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.
Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

7. Handling and storage

7.1 Precautions for safe handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to
"8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.
 Handle container with care, do not make it turn over, drop, give impact and drag.
 Do not breathe, contact and swallow.
 Maintain air concentrations below exposure limit using exhaust ventilation.
 Do not eat, drink or smoke when using this product.
 Wash hand thoroughly after handling.
 Use only outdoors or in awell-ventilated area.
 Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

7.2 Conditions for safe storage, including incompatibilities

Storage

Incompatible materials

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
 Store in a well ventilated place. Keep cool and container tightly closed.
 Store locked up.

The Containers

Use the container that our company filled up when ship products

7.3 Specific end uses

Not applicable

8. Exposure control/ personal protection

8.1 .1 Control parameters

Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	Not established	10mg/m3 (mist, TWA, 2009)
Triethanolamine	Not established	5mg/m3 (TWA, 2009)

8.2 Exposure controls

Equipment measures

Put up local exhaust ventilation.Use explosion-proof electrical/ventilating/lighting.
 Take precautionary measures against static discharge.
 Put up emergency eyewash and shower in case of storage or handling about this product.

Protection

Respiratory protection

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat ,drink or smoke when using this product.
 Wash thoroughly after handling.

9.Physical and chemical properties

Appearance

Purple Liquid

Odour

Slightly smell

Odour threshold

No data available

pH

7-8

Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	This ink is soluble in water.
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

Other information

No data available

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity–Oral	Not classified
Acute toxicity–Dermal	Not classified
Acute toxicity–Inhalation :vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations**Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.
Avoid release to the environment.

Contaminated container and packaging

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

14. Transport information

14.1 Un number

14.2 UN proper shipping name

14.3 Transport hazard class(es)

14.4 Packaging group

International regulation

IMDG(Maritime transport)

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-
Shipping name	-

ICAO/IATA(Air transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

ADR/RID(Land transport)

UN No.	Not applicable
Class	-
Packing Group	-
Shipping name	-

14.5 Environmental hazards

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified

14.6 Special precautions for user

Not applicable.

Special precautions

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting, take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

15. Regulatory information

Follow all regulation in your country.

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

Revision

2018/7/31 First version

Safety Data Sheet

Date of issue: 2017-04-01
Revision Date: -

1. Identification of the mixture and of the company

Product name : Ink for MILD LINER(WKT7-MR·MP·MOR·MY·MG·MBG·MBL·MDB·MVI·MGR·MSB·MGO·ME·MMZ·MVE)

Company : ZEBRA CO., LTD.
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN

TEL: +81-3-3268-1193
FAX: +81-3-3268-1197
Emergency telephone : +81-3-3268-1193
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.
(Japan time)

Product use : Infill Ink for writing implement

2. Hazards identification

GHS classification

Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Not classified
Acute toxicity-Inhalation: mist	Classification not possible
Skin corrosion / irritation	Category 3
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible / Category 1
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity (Single exposure)	Classification not possible
Specific target organ toxicity (Repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible

Environmental hazards

Hazardous to the aquatic environment (acute)	Not classified
Hazardous to the aquatic environment (chronic)	Not classified

GHS label elements

Pictograms or Symbol

Exclamation mark



Signal Word

Warning

Hazard statement

- Causes mild skin irritation
- May cause an allergic skin reaction
- Causes serious eye irritation

Precautionary Statements**Prevention**

- Read label and Material Safety Data Sheet before use.
- Avoid breathing dust/vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/eye protection.
- Wash hand thoroughly after handling
- Avoid release to the environment

Response

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- IF IN EYES: Rinse continuously with water for several minutes.
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

Storage

- Store in a well ventilated place. Keep cool and container tightly closed.

Disposal

- Dispose of contents/container to in accordance with local government regulation.

3. Composition/information on ingredients**Mixture****Component and Amount**

Component	Amount	CAS No.	Reference Number in Gazetted List in Japan (Japanese Chemical Substances Control Act)
Pigment Dispersions	30-55%	Nondisclosure	Nondisclosure(registered)
Glycerol	15-25%	56-81-5	(2)-242
Water	30-45%	7732-18-5	—
Additives	0-1%	Nondisclosure	Nondisclosure(registered)

4. First-aid measures**After inhalation:**

- Call a doctor/physician if you feel unwell.
- Remove victim to fresh air and keep at rest in a position comfortable for breathing.

After skin contact:

- Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Wash contaminated clothing before reuse
- Call a doctor/physician if you feel unwell.

After eye contact:

- Rinse continuously with water for several minutes.
- Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

After ingestion:

Call a doctor/physician if you feel unwell.

Protection of the person who takes first aid

Nothing in particular.

5. Fire-fighting measures

Suitable Extinguishing media

Carbon dioxide, dry chemical powder, water fog, foam

Prohibition extinguishing media for safety reason

Water spray (straight)

Specific hazards

This product is not combustible. But evaporated residue is combustible.

May produce toxic fumes if burning.

Specific fire fighting procedures

If safe to do so, move undamaged containers from the fire area.

If can't move the container, cool containers and surrounding with spray water.

Cool containers with large quantities of water until well after extinguished the fire.

Special protective equipment for fire-fighters

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

6. Accidental release measures

Personal precautions

The pollution area should be established as off limits without concerned persons.

Protective equipment and emergency measure

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

Environmental precautions

Keep away from drains, and prevent from releasing to the environment.

Methods for cleaning up

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

Prevention of secondary disaster

Remove nearby ignition source and hot surface.

7. Handling and storage

Handling

Technical measures

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

Caution

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.
Maintain air concentrations below exposure limit using exhaust ventilation.
Do not eat, drink or smoke when using this product.
Wash hand thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Avoid release to the environment.

Avoid contact

Refer to section 10 about stability and reactivity.

Storage**Incompatible materials**

Refer to section 10 about stability and reactivity.

Storage condition

Store away from heat/sparks/open flames – No smoking
Store in a well ventilated place. Keep cool and container tightly closed.
Store locked up.

The Containers

Use the container that our company filled up when ship products

8. Exposure control/ personal protection**Exposure limit values**

Chemical name	Permissible concentration		Administrative levels
	The Japan Society for Occupational Health	ACGIH TLV-TWA	Ministry of Health, Labour and Welfare(JAPAN)
Glycerol	Not established	10mg/m3 (mist, TWA, 2009)	Not established

Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
Take precautionary measures against static discharge.
Put up emergency eyewash and shower in case of storage or handling about this product.

Protection**Respiratory protection**

If necessary use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

If necessary use suitable face protection.

Hygiene measures

Do not eat, drink or smoke when using this product.
Wash thoroughly after handling.

9. Physical and chemical properties

Appearance	Coloring Liquid
Odour	Peculiar odour
pH	5.0-7.5
Melting point / Coagulating point	No data available
Boiling point	Over 100°C

Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Specific gravity	No data available
Water solubility	No data available
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available

10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation:vapour	Not classified
Acute toxicity-Inhalation:mist	Classification not possible
Skin corrosion / irritation	Category 3
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Classification not possible/Category 1
Germ cell mutagenicity	Classification not possible
Carcinogenicity	Classification not possible
Reproductive toxicity	Classification not possible
Specific target organ toxicity(Singel exposure)	Classification not possible
Specific target organ toxicity(Repeated exposure)	Classification not possible
Aspiration hazard	Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)	Not classified
Hazardous to the aquatic environment(chronic)	Not classified
Degradability	No data is available
Bioaccumulative potential	No data is available
Mobility in soil	No data is available

13. Disposal considerations

Waste residues

Disposal must be made according to official regulations.
Avoid release to the environment.

Contaminated container and packaging

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

14. Transport information

The contents are as follows when transport only ink

International regulation**IMDG(maritime transport)**

UN No.	Not applicable
Class	-
Packing Group	-
Marine Pollutant	-

ICAO/IATA(air transport)

UN No.	Not applicable
Class	-
Packing Group	-

Special precautions

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are applied to transport of writing instruments filled with the ink.

15. Regulatory information(Japan)**Industrial Safety and Health Act****Article 57-2 paragraph (1) "notifiable substances"**

Not applicable

Order for Enforcement Article 1, 6, 9-3 Appended Table 1 item(IV)**dangerous substances ·inflammable substances**

Not applicable

Poisonous and Deleterious Substances Control Law**Article 2 Appended Table 1 and 2**

Not applicable

Act on confirmation, etc. of Release Amounts of Specific Chemical Substances**in the Environment and Promotion of Improvements to the Management There of****Article 2 Class I , II Designated Chemical Substances**

	※1	※2	※3
Sodium alpha-dodecan-1-yl-omega-(sulfonatooxy)poly(oxyethylene)	1.2%	1.5%	Not applicable

※1 MR·MG·MDB

※2 MVI·MGR·MSB·MGO·ME·MMZ·MVE

※3 Except ※1, 2 color

Fire Service Law**Article 2 paragraph (7) hazardous material Appended Table 1**

Not applicable

Ship Safety Act

**Regulations for the carriage and storage of dangerous goods in ship Article 2, 3
dangerous goods public notice Appended Table 1**

Not applicable

Civil Aviation Law

Ordinance for Enforcement Article 194 dangerous goods public notice Appended Table 1

Not applicable

16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

Reference

Globally Harmonized System of Classification and Labelling of Chemicals (GHS) second revised edition 2007

Recommendation of Occupational Exposure Limits(2009-2010) by The Japan Society for Occupational Health

2009 TLVs and BEIs by ACGIH