

Safety Data Sheet

Date of issue: 2014-10-31
Revision Date: -

1. Identification of the mixture and of the company

Product name : Z-Grip 1.0 Refill (Green) Ink
 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	Category 4
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Not classified
Acute toxicity-Inhalation: mist	Not classified
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Not classified / 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

GHS label elements

Pictograms or Symbol

Exclamation mark



Signal Word

Warning

Hazard statement

- Harmful if swallowed
- 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
- 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 SWALLOWED: Rinse mouth .Call a POISON CENTER or doctor/physician if you feel unwell
- 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
- Wash contaminated clothing 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**Mixture****Component and Amount**

Component	Amount	CAS No.	Reference Number in Gazetted List in Japan (Japanese Chemical Substances Control Act)
Dyes	20-25%	Nondisclosure	Nondisclosure(registered)
Resins	25-30%	Nondisclosure	Nondisclosure(registered)
Propylene glycol	10-15%	57-55-6	(2)-234
Ethylenglycol monophenyleth	20-25%	122-99-6	(9)-1277
Benzyl alcohol	10-15%	100-51-6	(3)-1011
Triethanolamine	1-5%	102-71-6	(2)-308

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

- Call a doctor/physician if you feel unwell.
- Wash contaminated clothing 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:

Rinse mouth. Call a POISON CENTER or 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

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.
Equipped with suitable extinguishing media. (Preparation for in case of ignition)

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)
Propylene glycol	Not established	Not established	Not established
Ethylenglycol monophenylether	Not established	Not established	Not established
Benzyl alcohol	Not established	Not established	Not established
Triethanolamine	Not established	5mg/m ³ (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

Use suitable respiratory protection.

Hand protection

Use suitable protective gloves.

Eye protection

Use suitable eye protection.

Skin/body protection

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	Green Liquid
Odour	Peculiar odour
pH	6
Melting point / Coagulating point	No data available
Boiling point	260°C
Flash point	>55°C (reference: ethyleneglycol monophenyl ether 127°C)
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	Insoluble
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	Strong oxidizing agent
Conditions to avoid	High temperature
Incompatible materials	Strong oxidizing agent
Hazardous decomposition products	Nothing in particular.

11. Toxicological information

Acute toxicity-Oral	Category 4
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Not classified
Acute toxicity-Inhalation: mist	Not classified
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Category 2
Respiratory or skin sensitization	Not classified / 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 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

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.

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