2014-10-31 Z-Grip 1.0 (Black) Ink

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 (Black) Ink Company : ZEBRA CO., LTD.

2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN

TEL: +81-3-3268-1193 FAX: +81-3-3268-1197 : +81-3-3268-1193 Emergency telephone

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 Category 4 Not classified Pyrophoric liquids Not classified Self-heating mixtures Corrosive to metals Not classified

Health hazards

Category 4 Acute toxicity-Oral

Acute toxicity-Dermal Classification not possible

Acute toxicity-Inhalation: vapour Category 4

Acute toxicity-Inhalation: mist Classification not possible Skin corrosion / irritation Classification not possible

Serious eye damage / eye irritation Category 1

Respiratory or skin sensitization Classification not possible / 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 Classification not possible Aspiration hazard

GHS label elements

Pictograms or Symbol

Exclamation mark



Signal Word

Danger

Z-Grip 1.0 (Black) Ink 2014-10-31 2/6

Hazard statement

- Combustible liquid
- · Harmful if swallowed
- Causes serious eye damage
- · Harmful if inhaled
- Very toxic to aquatic life
- Very toxic to aquatic life with long lasting effects

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
- Keep away from heat/sparks/open flames/hot surfaces No smoking
- •Use only outdoors or in a well-ventilated area
- •Wear protective gloves/eye protection.
- ·Wash hand throughly after handling
- Avoid release to the environment

Response

- •IF SWALLOWED: Rinse mouth and call a POISON CENTER or doctor/physician if you feel unwell
- •IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- •IF IN EYES: Immediately call a POISON CENTER or doctor/physician Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do . Continue rinsing
- ·Call a POISON CENTER or doctor/physician if you feel unwell
- Collect spillage

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

Reference Number in Gazetted List in Japan

| Component | Amount | CAS No. | (Japanese Chemical Substances Control Act) |
|--------------------------------|--------|---------------|--|
| Dyes | 0-45% | Nondisclosure | Nondisclosure(registered) |
| Resins | 15-20% | Nondisclosure | Nondisclosure(registered) |
| Benzyl alchol | 30-35% | 100-51-6 | (3)–1011 |
| Ethylenglycol monophenyleth | 10-15% | 122-99-6 | (9)–1277 |
| 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:

Call a doctor/physician if you feel unwell.

If skin irritation occurs: Get medical advice/attention

Z-Grip 1.0 (Black) Ink 2014-10-31 3/6

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 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

Combustible. Will be easily ignited by heat, sparks or flames

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".

Z-Grip 1.0 (Black) Ink

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 throughly 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.

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

| · | Permissible c | Administrative levels | |
|-------------------------------|---|-----------------------|--|
| | The Japan Society for Occupational Health | | Ministry of Health, Labour and Welfare(JAPAN) |
| Ethylenglycol monophenylether | Not established | Not established | Not established |
| Benzyl alchol | Not established | Not established | 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.

Z-Grip 1.0 (Black) Ink 2014-10-31 5/6

9. Physical and chemical properties

AppearanceBlack LiquidOdourPeculiar odour

pH 7–9

Melting point / Coagulating point No data available

Boiling point No data available

Flash point 93°C

Explosive limit UEL

Explosive limit LEL

No data available

No data available

No data available

Vapour pressure

No data available

No data available

Specific gravity 1.1–1.3

Water solubility
Partition coefficient n-octanol/water
No data available
No data available
No data available
Decomposition point
No data available

10. Stability and reactivity

Chemical stability This product is stable in normal condition.

Materials to AvoidStrong oxidizing agentConditions to avoidHigh temperatureIncompatible materialsStrong oxidizing agentHazardous decomposition productsNothing in particular.

11. Toxicological information

Acute toxicity-Oral Category 4

Acute toxicity-Dermal Classification not possible

Acute toxicity-Inhalation: vapour Category 4

Acute toxicity-Inhalation: mistClassification not possibleSkin corrosion / irritationClassification not possible

Serious eye damage / eye irritation Category 1

Respiratory or skin sensitization Classification not possible Classification not possible

Germ cell mutagenicity
Carcinogenicity
Classification not possible

12. Ecological information

Hazardous to the aquatic environment(acute)

Category 1

Hazardous to the aquatic environment(chronic)

Category 1

DegradabilityNo data is availableBioaccumulative potentialNo data is availableMobility in soilNo data is available

Z-Grip 1.0 (Black) Ink 2014-10-31

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)

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