# SAFETY DATA SHEET

Date Revised: 27/Nov/2019

# 1. Identification of the substance / preparation and of the company

#### 2. Hazards identification

Classification

Exposure of hazardous substances are not expected under general use of marking pen.

Other hazards

This products are contain a small volume of ink which is a flammable liquid. The ink is highly flammable liquid and vapour Exposures to liquid and vapour from misuse of the product may cause skin irritation, eve irritation or drowsiness and dizziness.

Precautionary Statements :

Do not handle until all safety precautions have been read and understood. Use only in the well-ventilated areas. Recap after use. Do not drop to avoid ink leakage or damage. Keep out of reach of children. Keep cool and protect from sunlight. Keep away from hot surfaces. Do not eat, drink or smoke when using this product. If on skin: Wash with soap and water. If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. If eye irritation persists, get medical advice/attention. If you feel unwell or skin irritation occurs, get medical advice/attention. Keep away from ignition sources such as heat/sparks/open flame. Wash thoroughly after handling. Avoid release to the environment. - if this is not the intended use. Dispose in accordance with local state and federal regulations. Do not throw into fire even used up.

[GHS Classification] Not classified

XAssume the general use of oily marking pen.

In case of industrial use, it may be subject to any regulation.

Therefore in case of any special usage, sufficient attention is required irrespective with classification of users.

# 3. Composition / Information on ingredients

## For ink unless otherwise specified. CHEMICAL PRODUCT : Mixture (Paint Marker ink)

Ingredients	CAS No.	% BY WEIGHT
Tigi eureites		White
Ethylcyclohexane	1678-91-7	22
Methylcyclohexane	108-87-2	19
Resins	69430-35-9	24
Titanium dioxide	13463-67-7	25
Ceramic materials and wares, chemicals	66402-68-4	6
Silane, dichlorodimethyl-, reaction products with silica	68611-44-9	1
Addition-agent etc.	Confidential	3

(specifications of the ink formulation) Other ingredient : Poly(oxyethylene) alkyl ether (alkyl C=12-15) (0.15%)

# 4. First aid measures

INHALATION	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing.
		The nasal cavity and the mouth are washed by gargle etc.
		Medical attention is received if necessary.
SKIN CONTACT	:	Wash skin with plenty of soap and water. Wash contaminated clothing before use.
		If irritation is continued, get medical attention.
EYE CONTACT	:	Rinse cautiously with water for several minutes.
		If eye irritation persists, get medical attention.
INGESTION	:	Rinse mouth with water or wet towel. Do not induce vomiting.
		Never give anything by mouth to an unconscious person.
		Immediate induce vomiting unless the victim is unconscious.
		Immediately call a doctor/physician.

#### 5. Fire-fighting measures

This products are contain a small volume of ink which is a flammable liquid.

Extinguihing media : Regular dry chemical powder, carbon dioxide, dry sand Prohibited : Do not use a water jet since it may spread fire. Specific hazards : Heating may induce explosion of containers(pen body). Specific fire-fighting : For a fire that has just started, use regular dry chemical powder, carbon dioxide and dry sand. Sprinkle water, if any other fire-fighting procedures are unlikely to be effective in a large fire. Move containers away from the fire if safe to do so. Fight fire from the most distant place within the effective range using unmanned hoses or monitored nozzles. Cool surrounding combustible equipment by sprinkling water. Move removable, combustible containers to a safe place.

# 6. Accidental release measures

Do not get in eyes or on skin. Ventilate area. Avoid release to the the environment. Wipe up the spilt ink with absorbent material(cloth etc.). Keep away from ignition sources such as heat, sparks or open flame.

#### 7. Handling and storage

HANDLING : Avoid contact with skin or eyes. Recap after use.			
Use only in the well-ventilated areas.			
Do not treat near the fire, the spark, and the high temperature.			
Do not eat, drink or smoke when using this product.			
After a pen point push, use it after waiting for penetration of the ink to			
a pen point.			
The ink may leak, if a pen point push too much.			
Wipe off the ink attached to the pen body and cap.			
Avoid release to the environment. $-$ if this is not the intended use.			
STORAGE : Keep away from sunlight. Keep cool and dry in a well-ventilated area.			
Keep away from ignition sources such as heat/sparks/open flame.			
Keep away from reach of children.			

#### 8. Exposure controls / Personal protection

EXPOSURE LIMIT : Non established. VENTILATION : Use in well ventilated area. PERSONAL PROTECTION : None. Avoid the contact of ink to skin or eyes.

#### 9. Physical and chemical properties

For ink unless otherwise specified

PHYSICAL STATE : liquid (Each color) ODOR : Solvent odor Relative density : about 1 Flash point : below 10 °C Ignition point : 238°C (ECH), 250°C (MCH) Boilng point : 132 °C (ECH), 100°C (MCH) Percent volatile by volume : 41 % Vapor pressure (20°C) : 12.8 mmHg (ECH) Vapor density (air=1) : 3.87 (ECH) Flammability limits (% by volume) : Lower 0.9 vol% Upper 6.6 vol% (ECH) Solubility in water : Insoluble (Solvent) soluble in ethanol and ether

#### 10. Stability and reactivity

Not data available : Stable at normal ambient and anticipated storage and handling conditions of temperature and pressure. However, the ink is flammable liquid (vapor) with low flashing point.

## 11. Toxicological information

For Ink : Not data available

For ingredients: as per "2. Hazards identification" Carcinogenicity : Carbon black : IARC 2B (Possibly carcinogenic to humans) Titanium dioxide : IARC 2B (Possibly carcinogenic to humans) GHS HEALTH HAZARDS (Classification in Japan) Ethvlcvclohexane Aspiration hazard [Category 1] . Methylcyclohexane : Acute toxicity(Oral) [Category 4] Skin corrosion/irritation [Category 3] Serious eye damage/eye irritation [Category 2B] Specific target organ toxicity - Single exposure [Category 3 (Narcotic effects)] Aspiration hazard [Category 2]

Titanium dioxide : Carcinogenicity [Category 2] pecific target organ toxicity - Repeated exposure [Category 1 (respiratory system)

#### 12. Ecological information

For Ink : Not data available

For ingredients: as per	"2.	Hazards identification"		
GHS ENVIRONMENTAL HAZARDS(Classification in Japan)				
Ethylcyclohexane	:	Hazardous to the aquatic environment(Acute) [Category 1]		
		Hazardous to the aquatic environment(Long-term) [Category 1]		
Methylcyclohexane	:	Hazardous to the aquatic environment(Acute) [Category 2]		
		Hazardous to the aquatic environment(Long-term) [Category 2]		
Titanium dioxide	:	Hazardous to the aquatic environment(Long-term) [Category 4]		

## 13. Disposal considerations

Dispose in accordance with local state and federal regulations.

# 14. Transport information

Protect from sunlight, keep away from heat, Note the water wet. Avoid rough handling. Road transport regulation(Japan) : Not applicable Comply with national and local regulations.

General name : Marking Pen (Paint Maker)

This products are contain a small volume of ink which is a flammable liquid. The amount of filling ink : 5.3g per piece

# 15. Regulatory information

Follow all regulations in your countries.

# 16. Other informations

Substances do not directly mean legally regulated. It depands on use and other conditions.

To the best of our knowledge, the information contained here in accurate. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards are described herein, we cannot guarantee that these are the only hazards that exist.