



Product Information Data Sheet

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Product Name (Chemical Name, Trade Name, etc.)

Pen

Ink for Pen and ribbon cassette as the chart recorder's accessories includes chemical substances specified in Japanese domestic law 'Industrial Safety and Health Act'. Please read safety information in the safety data sheet (next page) of parts below for your safety and appropriate use.

Parts No.	Product Name in Safety Data Sheet
B9586XF	RECORDER INK TM-510 Series
B9937NT	RECORDER INK TM-510 Series

The information herein is only provision of information, and it does not represent a guarantee the properties of the product.

Safety Data Sheet

DATE PREPARED Jul. 13. 2015

DATE REVISED Aug. 04. 2015

1. Product and Company Identification

Product Name: RECORDER INK TM-510 Series
Box Label indication : B9586WP, B9937NF, B9937NT
 B9586XF
 (See Section 16. other information)

Company Name: Chugai Kasei Co.,Ltd.
Address (Head Office) : 35-3,Akaizawa,Nihonmatsu-shi,Fukushima 964-0982, Japan
Telephone Number: +81-243-22-6050
Department: Sales Department
Address (Tokyo SalesOffice) : 2-7-11Sarugaku-cho,Chiyoda-ku,Tokyo 101-0064, Japan
Telephone (Tokyo Sales Office): +81-3-3291-3451
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FAX Number: +81-3-3291-3315
E-mail Address: kamino-s@chugaichem.co.jp

Recommended Use and Limitation on Use: Ink for Recorder use only

2. Hazard Identification

GHS Class

Physical Hazards

Flammable liquids:
Corrosive to metals
Other Physical Hazards

Classification not possible
 Classification not possible
 Not Applicable

Health Hazards

Acute Toxicity (oral):
Acute Toxicity (dermal):
Acute Toxicity (inhalation: vapor):
Skin corrosion, irritation:
Serious eye damage, eye irritation:
Carcinogenicity:
Other Health Hazards

Classification not possible
 Classification not possible
 Classification not possible
 Category 3
 Category 2B
 Category 2
 Not classified

Environmental Hazards

Acute hazardous to the aquatic environment
Chronic hazardous to the aquatic environment

Not classified
 Not classified

Symbol(s) or Pictogram:



Signal Word(s):

Warning

Hazard Information:

- Causes mild skin irritation.
- Cause eye irritation.
- Suspected of causing cancer

Precautionary Statement

[Safety Measure]

- Avoid breathing mist/vapours/spray.
- Seal a bottle hermetically and keep.
- Wash face and hands thoroughly after handling.
- Do not eat,drink,or,smoke,when using this product,
- Wear protective gloves and eye/fase protection.

[First-Aid Measures]

- Immediately call a physician if you feel unwell.
- IF INHALED : Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a physician if you feel unwell.
- IF ON SKIN : Wash with plenty of soap and water.
Immediately, take off contaminated clothing.
If skin irritation occurs,get medical advice/attention.
- IF IN EYES : Rinse cautiously with Water for several minutes.
- IF INGESTION :
Do not induce vomiting unless instructed to do so by physician.
Wash out mouth with water and keep at rest. Seek immediate medical attention.

[Storage]

- Close the container tightly in a room dry/well-ventilated area.

[Disposal]

- Comply with applicable local state or international regulations regarding the proper disposal of this material and/or containers.

3. Composition/Information on Ingredients

Product Type [Single or Mixture]: Mixture
 Chemical Name or Generic Name: Mixture of Acid dye, Gryceline and Water
 Chemical Characteristics: Not Disclosed

Ingredients, Content, etc.	CAS No.	Content(%)	EINECS
Acid Violet 49	1694-09-3	1~3	216-901-9
Glycerine	56-81-5	40-50	200-289-5
Preservative(Butylparaben)	94-26-8	0.1-0.3	202-318-7
Water	7732-18-5	50-60	231-791-2

4. First Aid Measures

If inhaled:
 Immediately remove the victim to fresh air, keep warm with cover or blanket, and at rest. Immediately consult doctor.
 If breathing but vomiting, turn the victim's head to the side.

If on skin:
 Immediately take off contaminated clothing, shoes, etc. Rinse portions that contacted with this product with running water or lukewarm water.
 If any change in appearance or pain persists, immediately consult doctor.

If in eyes:
 After washing with clean water for at least 15 minutes, immediately consult doctor.
 At rinsing eyes, holding wide open eyelids with fingers, thoroughly rinse eyeball and inner surface of eyelids with water. If contact lenses are used, unless adhered, remove them and rinse eyes. Do not rub eyes, nor do not let the victim close eyes tightly.

If swallowed:
 Rinse mouth thoroughly. May dilute in stomach with 1 or 2 glasses of water or milk. Immediately seek medical attention.
 If breathing but vomiting, turn the victim's head to the side.
 If unconscious, do not give anything by mouth and do not induce vomiting.

Potential Health Effects:
 Eyes, skin and a respiratory trachea are stimulated.
 Inhalation: a cough, a headache and nausea are caused.
 May cause inflammation to skin(dermatitis),eyes(conjunctivitis),and respiratory tract.

**Protection of First Aid
Personnel:**

Rescuer must wear protective equipment, such as gloves, goggle, and mask to avoid contact with hazardous material. Remove any contaminated clothing and protective equipment.

5. Fire – Fighting Measures

Extinguishing Media:

Powder, foam, carbon dioxide.

Particular Hazards:

Combustion gas contains harmful substances such as CO, NOx, and SOx..
Be careful not to inhale fumes or gas during extinguishing fire.

**Particular
Extinguishing Method:**

Keep combustion source away from fire source, and extinguish fire with appropriate fire extinguisher.
Extinguish fire from the windward side as much as possible.
Harmful gas (CO, NOx, SOx, etc.) may be generated by combustion or high temperature.
Use respiratory protective equipment.
In case of initial fire extinguishing, use powder, carbon dioxide, etc.
In case of large size of fire, extinguish fire at once using foam extinguisher, etc.

**Protection of Fire
Fighting Personnel:**

Extinguish fire from the windward side, and avoid inhalation of harmful gases.
Must wear appropriate protective equipment (gloves, eyeglasses, mask, etc.).

6. Accidental Release Measures

**Cautions on Human Body:
Environmental Cautions:**

Use proper personal protective equipment as indicated in Section 8.
Be careful not to let the leaked/spilled product enter river, etc. and not to significantly influence organisms and water quality in the environment.

How to Remove:

Absorb spills with dry sand, cloth, paper or the inert absorbing material, and then collect in an empty container that can be tightly closed.

**Preventive Measures for
Secondary Disaster:**

no information

7. Handling and Storage

Handling Technical Measures:

Use within quality warranty period. Handle in a well-ventilated area.
For handling outside, handle from the windward side as much as possible.
Install facility for rinsing eyes and washing body near the handling area.
Handle with appropriate protective equipment to prevent contact with clothing, skin, or mucous membranes or get in eyes.
At rest area, provide facility for washing hands and eyes.
Keep fire away.
After handling, wash thoroughly hands, face, etc.

Cautions:

Do not handle the product roughly, such as falling, dropping, dragging, or giving impact on the product.
Handle in a place equipped with a full ventilation system.

Storage Technical Measures:

Ventilate area so as not to let vapor stay. Keep combustible materials away.
Keep away from fire and heat source.

Storage conditions:

Avoid direct sunlight, and store in a dry place. Close the container tightly and store in a well-ventilated place. Keep fire away.

**Substances prohibited
to mix or contact with:**

Oxidizing agents, Sulfuric acid, Nitric acid, Sulfuric acid

**Container and wrapping
Materials:**

No Information

8. Exposure Controls / Personal Protection

Ventilation :	General precautionary measures suggest ues with adequate ventilation.
Permissible Concentration:	ACGIH TWA [Glycerine] : 10mg/m ³
Protective Equipment	
For respiratory:	Gas mask for organic gas, air-supply mask, respirator
For Hands:	Rubber or polyvinyl chloride gloves (Impermeable)
For eyes:	protective eyeglasses (goggle type)
For skin and body:	Protective clothing, boots, etc.
Sanitary requirement :	Do not eat,drink,or,smoke,when using this product, Wash hands thoroughly after handling.

9. Physical and Chemical Properties

Appearance, etc.	
Physical sate:	Liquid
Color:	Purple
Odor:	faint odor
pH:	8.5~ 10
Boiling point. :	100~101℃
Flash point :	Not available
Density:	1.10~1.14 (at 20℃)
Solubility :	Miscible in water
Viscosity :	4.9~6.5 c. p

In addition, there is the following information on the components , [Glycerine].

**Specific Temperature and
Temperature Range where
the Physical Property changes:**

Boiling Point:	290 deg C (decomp.)
Freezing/Melting Point:	20 deg F
Flash Point:	193 deg C
Ignition Point:	400 deg C
Explosion Characteristics:	not available
Vapor Pressure:	1300 Pa(167.2 deg C)
Vapor Density:	3.17 (Water=1)
Solubility to Solvent:	Miscible in water

10. Stability and Reactivity

Stability:	Considered stable for normal storage and handling.
Reactivity:	Risk of fire or explosion if contact with strong oxidizer.
Condition to Avoid :	Heat,flames,ignition sources,excess heat,and high humidity.
Substances prohibited to mix or contact with Incompatibility :	Oxidizing agents,Sulfuric acid, Nitric acid
Hazardous Decomposition Products :	May generate CO, NOx, SOx, etc. by pyrolysis.

11. Toxicological Information

No information on this product. But there is the following information on the components, [Glycerine] and [Preservative]

Acute Toxicity**Oral:**

[Acid Violet 49]	No information found
[Glycerine]	Rat LD50 > 12600 mg/kg
[Preservative]	Mouse LD50 > 17000 mg/kg

Dermal:

[Glycerine]	Rabbit LD50 > 10000 mg/kg
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Inhalation :

[Glycerine]	No information found
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Skin Corrosion, Irritation

[Glycerine]	Rabbit : 500mg/24h Mildly Irritating. This product includes Glycerine beyond limited of cut-off value/concentration, so it's classified into category 3.
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Serious Damage to Eyes and Eye Irritation

[Glycerine]	Rabbit : 126 mg Mildly Irritating (Category 2B) This product includes Glycerine beyond limited of cut-off value/concentration, so it's classified into category 3.
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Skin Sensitization:

[Glycerine]	not available This product includes glycerine beyond limited of cut-off value/concentration, so it's classified into category 3.
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Germ cell Mutagenicity:

[Acid Violet 49]	No information available
[Glycerine]	Negative in Ames test (TA98 and TA100)

Carcinogenesis:

[Acid Violet 49]	IARC : 2B category 2B
[Glycerine]	not available

Other Health Hazards :

No specific health warning noted.

Other Toxic Effect on Humans :

Hazardous in case of skin contact (irritant), of ingestion, of inhalation.

12. Ecological information**Hazards to Aquatic Environment (Acute)**

No information available

Persistence, Decomposability

No information available

COD

$3.0 \times 10^5 \sim 3.9 \times 10^5$ mg/l

13. Disposal Consideration**Residual Waste**

Harmful gas (CO, NOx, SOx, etc.) may be generated, incinerate in an incinerator equipped with an exhaust gas purifying device, or request for disposal to a specialized waste disposal company permitted by the prefectural governor. Discharge of cleaning water, etc. must be done after purifying by treatment, such as coagulation sedimentation, or by activated sludge.

Contaminated container and package:

For disposal of an empty container, dispose after completely removing the content. Comply with applicable local, state or international regulations regarding the proper disposal of this material and/or containers.

14. Transportation Information

UN Hazard Class:	Non-hazardous for air, sea and road freight.
UN Number:	Non-Regulated
Packing Group	Not Regulated
Domestic Regulations:	Not Applicable
	Transport by container, packing, labeling, loading, and transportation method in accordance with provisions, such as the Fire Service Law, and the Ship Safety Law.
Specific Safety Measures and Conditions for Transportation:	Transport at low temperature (recommended temperature: <40°C). Before transportation, make sure that there is no damage, corrosion, leak, etc. on the container. Load without falling, dropping, or damaging the product, and make sure the loaded products are well secured. Vehicle and ship for the transportation should be equipped with protective equipment (gloves, eyeglasses, mask, etc.), fire extinguisher, and tools necessary for emergency.

15. Regulatory Information

This product is followed by the competent regulations in an applicable country or region.

16. Other Information

Label indication :

Box Label indication	Colors (Quantity)	Contents
B9586 WP	Purple	500ml

The above information is prepared based on currently available reference materials, information, and data, and will not make any warranties for the contents, physicochemical properties, hazards, etc. In addition, since the above cautions are intended for normal handlings, for special handling, please use the material with appropriate safety measures for the use and application.