MIMCIKI[®] Safety Data Sheets

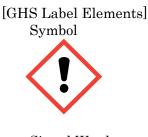
1. Identification

Product Name	: Dye Sublimation Ink Sb54 Magenta T	
Order No.	: SB54-MT-44/ SB54-MT-2L	
General Use	: Ink jet printing ink	
Product Description	: Dye Sublimation Ink	
SDS Number	: 037-W360365	
Manufacture		
Company Name	: Mimaki Engineering Co., Ltd.	
Address	2182-3 Shigeno-otsu, Tomi-shi, Nagano 389-0512 JAPAN	
Telephone No.	: +81-268-64-2413	
Importer / Distributor Established in USA		
Company Name	: MIMAKI USA, INC.	
Address	: 150 Satellite Boulevard, suite A, Suwanee, Georgia 30024, U.S.A.	
Telephone No.	: +1-678-730-0100	
Emergency Telephone No.	: +81-268-64-2281	

2. Hazards Identification

[GHS Classification]	
Physical Hazards	
Flammable Liquids	: Not classified
Health Hazards	
Eye Damage / Irritation	: Category 2
Sensitization – Skin	: Category 1

The above list does not include category being non-classifiable or not-applicable.



Signal Word Warning



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Hazard Statements H317 May cause an allergic skin reaction H319 Causes serious eye irritation **Precautionary Statements** [Prevention] P261 Avoid breathing gas/mist/vapors. P264 Wash hands thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection. Responsel P302+P352 IF ON SKIN: Wash with plenty of soap and water. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P321 Specific treatment (see 4-Response on our website/SDS URL: www.mimaki.co.jp/sds). P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash before reuse. [Disposal] P501 Dispose of contents/container in accordance with local/regional/national/ international regulation (to be specified).

NFPA Rating (scale 0 - 4)

Health = 2

Flammability = 1Instability = 0

Special =



CANADIAN WHMIS SYMBOLS

D2B



Composition / Information on Ingredients 3.

No	Chemical Name	Wt%	CAS No.
1	Propylene glycol	10-20	57-55-6
2	Glycerin	5-15	56-81-5
3	Dye	1-10	Trade Secret
4	Water	55-65	7732-18-5
5	Other	<10	Trade Secret



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First Aid Measures 4. Inhalation Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician. Eye Contact : Flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention. Skin Contact : Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation or rash occurs: Get medical advice/attention. Ingestion : If swallowed, get medical attention. Most Important Symptoms/Effects Acute : allergic skin reaction, mild skin irritation, eye irritation Delayed : allergic skin reaction Indication of Immediate : Treat symptomatically and supportively. Medical Attention and **Special Treatment** Needed, If Needed

5. Fire Fighting Measures

Flammable Properties	: Flash point Not flammable
Extinguishing Media	: carbon dioxide, regular dry chemical, water spray, alcohol resistant
	foam
Unsuitable Extinguishing	: Do not scatter spilled material with high-pressure water streams.
Media	
Special Hazards Arising	: Negligible fire hazard.
from the Chemical	
Hazardous Combustion	: oxides of carbon, acrolein, oxides of sulfur
Products	
Fire Fighting	: Move container from fire area if it can be done without risk. Do not
Measures	scatter spilled material with high-pressure water streams. Cool
	containers with water spray until well after the fire is out. Stay
	away from the ends of tanks. Avoid inhalation of material or
	combustion by-products.
Special Protective	: Wear full protective fire fighting gear including self contained
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Equipment andbreathing apparatus (SCBA) for protection against possiblePrecautions forexposure.Firefighters

6. Accidental Release Measures

Personal Precautions,	: Wear personal protective clothing and equipment, see Section 8.
Protective Equipment	Avoid release to the environment.
and Emergency	
Procedures	
Methods and Materials	: Eliminate all ignition sources if safe to do so. Stop leak if possible
for Containment and	without personal risk. Reduce vapors with water spray.
Cleaning Up	Small spills: Absorb with sand or other non-combustible material.
	Collect spilled material in appropriate container for disposal.
	Large spills: Dike for later disposal. Keep unnecessary people away,
	isolate hazard area and deny entry. Stay upwind and keep out of low
	areas.

7. Handling and Storage

Precautions for Safe	: Avoid breathing gas, mist or vapors. Avoid contact with eyes, skin and	
Handling	clothing. Do not eat, drink, or smoke when using this product. Wear	
	protective gloves and eye/face protection. Wash thoroughly after	
	handling. Contaminated work clothing should not be allowed out of	
	the workplace.	
Conditions for Safe	: Store and handle in accordance with all current regulations and	
Storage, including any	standards. Store in a well-ventilated place. Keep container tightly	
Incompatibilities	closed. Keep cool. Keep separated from incompatible substances.	

8. Exposure Controls / Personal Protection

Exposure Limit Values	: Glycerin (56-81-5)	
	OSHA: 15 mg/m ³ TWA (mist, total particulate);	
	5 mg/m ³ TWA (mist, respirable fraction)	
	Mexico 10 mg/m ³ TWA LMPE-PPT (mist)	



Component Biological	: There are no biological limit values for the component(s) of this
Limit Values	product.

Exposure Controls

Vapor Respirator

Gloves Eye Protection

> Safety Glasses

Skin Protection

rotective Apron

Hand Protection

Occupational Exposure Controls

Appropriate	$\ddot{\cdot}$ Provide local exhaust or process enclosure ventilation system. Ensure
Engineering Controls	compliance with applicable exposure limits.
Personal Protection	
Respiratory	: Consult with a health and safety professional for specific respirators
Protection	appropriate for your use.

: Wear appropriate chemical resistant gloves.

: Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

: Wear appropriate chemical resistant clothing.

9. Physical and Chemical Properties

Appearance	- Physical State	: Liquid
	- Color	: Magenta
Odor		: unique odor
pH		: 7-9
Boiling Point / Boiling Range		: Not available
Melting Point / Melting Range		: Not available
Decomposition Temperature		: Not available
Flash Point		: Not flammable

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Auto ignition temperature	: Not available
Flammability (Solid, Gas)	: Not available
Explosive Properties	: Not available
Oxidizing Properties	: Not available
Upper / Lower Flammability or	: Not available
Explosive Limits	
Vapor Pressure	
Specific Gravity	: 1.0-1.2 (25 $^\circ~$ C)
Solubility	: Not available
Water Solubility	: Soluble
Partition Coefficient (n-octanol / Water)	: Not available
Viscosity	: 4-6 mPa·s (25 °C)
Vapor Density	: Not available
Evaporation Rate	: Not available

10. Stability and Reactivity

Reactivity	: No reactivity hazard is expected.
Chemical Stability	: Stable under normal conditions of use.
Possibility of Hazardous	: Will not polymerize.
Reactions	
Conditions to Avoid	Avoid flames, sparks, and other sources of ignition. Avoid contact
	with incompatible materials.
Incompatible Materials	[:] acids, bases, oxidizing materials, metal oxides, peroxides, reducing
	agents, combustible materials, halocarbons, metals, metal salts
Hazardous	: Combustion: oxides of carbon, acrolein, oxides of sulfur
Decomposition	

11. Toxicological Information

A auto Torrigity	: The component(s) of this material have been reviewed in various					
Acute Toxicity	• The component(s) of this material have been reviewed in various					
Component Analysis -	sources and the following selected endpoints are published:					
LD50/LC50	Propylene glycol (57-55-6)					
	Oral LD50 Rat 20 g/kg; Dermal LD50 Rabbit 20800 mg/kg					
	Glycerin (56-81-5)					
	Oral LD50 Rat 12600 mg/kg; Dermal LD50 Rabbit >10 g/kg;					



Inhalation LC50 Rat >570 mg/m³ 1 h Dye Oral LD50 Rat >5 g/kg

Information on Likely Ro	utes of Exposure
Inhalation	irritation, difficulty breathing, headache, nausea
Ingestion	: fever, nausea, vomiting, diarrhea, headache, dizziness, sleep
	disturbances, blood disorders, kidney damage, paralysis, reproductive
	effects, convulsions, skin disorders, stomach pain, drowsiness, loss of
	coordination, unconsciousness
Skin Contact	allergic reactions, irritation, nausea, headache, drowsiness, dizziness,
	loss of coordination
Eye Contact	irritation
Immediate Effects	allergic skin reaction, mild skin irritation, eye irritation
Delayed Effects	allergic skin reaction
Medical Conditions	: No information available for the product.
Aggravated by Exposure	
Irritation/Corrosivity	: mild skin irritation, eye irritation
Data	
Respiratory	: No information available for the product.
Sensitization	
Dermal Sensitization	: May cause an allergic skin reaction.
Germ Cell Mutagenicity	: No information available for the product.
Carcinogenicity	: Component Carcinogenicity
	No data listed by ACGIH, IARC, NTP, DFG or OSHA is available for
	the component(s) of this product.
Reproductive Toxicity	: No information available for the product.
Specific Target Organ	: No target organs identified.
Toxicity - Single	
Exposure	
Specific Target Organ	: No target organs identified.
Toxicity - Repeated	
Exposure	
Aspiration Hazard	: Not expected to be an aspiration hazard.



12. Ecological Information

	Handling is noted because it might influence the environment when leaking and abandoning it. Especially, note that the product doesn't flow directly to ground, the river, and the drain ditch.						
Component Analysis -	: Propylene glycol (57-55-6)						
Aquatic Toxicity	Fish: 96 Hr LC50 Oncorhynchus mykiss: 51600 mg/L [static]; 96 Hr						
	LC50 Oncorhynchus mykiss: 41 - 47 mL/L [static]; 96 Hr LC50						
	Pimephales promelas: 51400 mg/L [static]; 96 Hr LC50 Pimephales						
	promelas: 710 mg/L						
	Algae: 96 Hr EC50 Pseudokirchneriella subcapitata: 19000 mg/L						
	Invertebrate: 48 Hr EC50 Daphnia magna: >1000 mg/L [Static]						
	Glycerin (56-81-5)						
	Fish: 96 Hr LC50 Oncorhynchus mykiss: 51 - 57 mL/L [static]						
Persistence and	: No information available for the product.						
Degradability							
Bioaccumulation	: No information available for the product.						
Mobility	: No information available for the product.						
Other Toxicity	: No additional information is available.						

13. Disposal Considerations

	: Comply with all USA, national and local regulations.
	Do not dump this product into sewers, on the ground or into any body
	of water.
Disposal Methods	: Dispose in accordance with all applicable regulations.
Component Waste	: The U.S. EPA has not published waste numbers for this product's
Numbers	components.
Disposal of	: Empty containers may contain product residue. Dispose in
Contaminated	accordance with all applicable regulations.
Packaging	



Product Name: Dye Sublimation Ink Sb54 Magenta T SDS No. 037-W360365 First issue: 2015/04/13 Revised:

14. Transport Information

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	Check a thing without a leak in a container.					
	Perform prevention of collapse of cargo surely.					
US DOT Information	: Not regulated as a hazardous material for transport.					
TDG Information	: Not regulated as dangerous goods for transport.					
UN Number	: Not regulated					
Marine Pollutant	: Propylene glycol (57-55-6)					
	IBC Code: Category Z					

15. Regulatory Information

U.S. Federal Regulations	 None of this products components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan. 								
SARA TitleIII	: Acute Health: Yes								
Section 311/312	Chronic Health: No								
	Fire: No								
Pressure: No									
	Reactive: No								
U.S. State Regulations	: The following components appear on one or more of the following	g							
state hazardous substances lists									
	Component CA MA MN NJ PA								
	Propylene glycol (CAS No. 57-55-6)NoNoYesYes								
	Glycerin (CAS No. 56-81-5)NoYesYesYes								
	Not regulated under California Proposition 65								
Canada WHMIS	: D2B.								
CLASSIFICATION									
Canadian WHMIS	: Components of this material have been checked against the								
Ingredient Disclosure	Canadian WHMIS Ingredients Disclosure List. The List is composed								
		1.							

List (IDL)

of chemicals which must be identified on MSDSs if they are included in products which fall under WHMIS criteria specified in the Controlled



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Products Regulations and present above the threshold limits listed on the IDL. Propylene glycol (57-55-6) 1 % **Chemical Inventory** : Component Analysis - Inventory Listings US CA EU AU PHIL JPKR CN NZ Component

Propylene glycol (CAS No. 57-55-6)	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Glycerin (CAS No. 56-81-5)	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes

16. Other Information

Key/Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; CAS - Chemical Abstracts Service; CLP - Classification, Labelling and Packaging; EEC - European Economic Community; EIN (EINECS) - European Inventory of Existing Commercial Chemical Substances; ELN (ELINCS) - European List of Notified Chemical Substances; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IMDG - International Maritime Dangerous Goods; IBC Code -International Bulk Chemical Code; Kow - Octanol/water partition coefficient; LEL - Lower Explosive Limit; LOLI - List Of LIsts[™] - ChemADVISOR's Regulatory Database; MAK -Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NTP = National Toxicology Program; REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - European Rail Transport; STEL - Short-term Exposure Limit; TWA - Time Weighted Average; UEL - Upper Explosive Limit

Other Information

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