

Safety Data Sheets

Product Name: Dye Sublimation Ink Sb54

Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

1. Identification

Product Name : Dye Sublimation Ink Sb54 Blue T

Order No. : SB54-BLT-44/ SB54-BLT-2L

General Use : Ink jet printing ink
Product Description : Dye Sublimation Ink

SDS Number : 037-W360363

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

Skin Corrosion / Irritation : Category 2

Eye Damage / Irritation : Category 2

Sensitization – Skin : Category 1

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

[GHS Label Elements]

Symbol



Signal Word Warning



Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

Hazard Statements

H315 Causes skin irritation

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.

[Response]

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 = 1

Instability = 0

Special =



CANADIAN WHMIS SYMBOLS

D2B



3. Composition / Information on Ingredients

| 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 | 50-60 | 7732-18-5 |



Safety Data Sheets

Product Name: Dye Sublimation Ink Sb54

Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

| 5 | Other | <10 | Trade Secret |
|---|-------|-----|--------------|
| | | | i |

4. First Aid Measures

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

: Treat symptomatically and supportively.

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, skin irritation, eye irritation

Delayed : allergic skin reaction

Indication of Immediate

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



Blue T 7-Wecoece

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

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

breathing apparatus (SCBA) for protection against possible

Precautions for exposure.

Firefighters

Equipment and

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

for Containment and

Cleaning Up

: Eliminate all ignition sources if safe to do so. Stop leak if possible

without personal risk. Reduce vapors with water spray.

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

Handling

: Avoid breathing gas, mist or vapors. Avoid contact with eyes, skin and

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

Storage, including any

Incompatibilities

: Store and handle in accordance with all current regulations and $% \left(1\right) =\left(1\right) =\left(1\right)$

standards. Store in a well-ventilated place. Keep container tightly closed. Keep cool. Keep separated from incompatible substances.



Safety Data Sheets

Product Name: Dye Sublimation Ink Sb54

Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

8. Exposure Controls / Personal Protection

Exposure Limit Values : Glycerin (56-81-5)

OSHA: 15 mg/m³ TWA (mist, total particulate);

5 mg/m³ TWA (mist, respirable fraction)

Mexico 10 mg/m³ TWA LMPE-PPT (mist)

Component Biological

: There are no biological limit values for the component(s) of this

Limit Values product.

Exposure Controls

Occupational Exposure Controls

Appropriate : 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.

Vapor Respirator

Hand Protection : Wear appropriate chemical resistant gloves.

Gloves

Eye Protection

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

immediate work area.

Skin Protection

: Wear appropriate chemical resistant clothing.



9. Physical and Chemical Properties

Appearance - Physical State : Liquid

- Color : Blue



Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

Safety Data Sheets

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 Auto ignition temperature : Not available Flammability (Solid, Gas) : Not available **Explosive Properties** : Not available : Not available Oxidizing Properties : Not available Upper / Lower Flammability or

Explosive Limits

Vapor Pressure

Specific Gravity $: 1.0 \text{-} 1.2 \text{ (25}^{\circ} \text{ C)}$

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



Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

11. Toxicological Information

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

Information on Likely Routes 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, skin irritation, eye irritation

Delayed Effects : allergic skin reaction

Medical Conditions : No information available for the product.

Aggravated by Exposure

Irritation/Corrosivity : 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



Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

Safety Data Sheets

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.



Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

Packaging

14. Transport Information

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 : None of this products components are listed under SARA Sections

Regulations 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 Title III : 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

state hazardous substances lists

| Component | CA | MA | MN | NJ | PA |
|------------------------------------|----|-----|-----|-----|-----|
| Propylene glycol (CAS No. 57-55-6) | No | No | Yes | Yes | Yes |
| Glycerin (CAS No. 56-81-5) | No | Yes | Yes | Yes | Yes |

: 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 of



Blue T

SDS No. 037-W360363 First issue: 2015/04/13

Revised:

List (IDL) chemicals which must be identified on MSDSs if they are included in

products which fall under WHMIS criteria specified in the Controlled Products Regulations and present above the threshold limits listed on

the IDL.

Propylene glycol (57-55-6) 1 %

Chemical Inventory : Component Analysis - Inventory

Listings

| Component | US | CA | EU | AU | PHIL | JP | KR | CN | NZ |
|---------------------------------------|-----|-----|-----|-----|------|-----|-----|-----|-----|
| 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 LIstsTM - 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

This information is furnished without warranty, express or implied, except that it is accurate to the best knowledge of Mimaki Engineering Corporation.

It relates only to the specific material designated herein, and does not relate to use in combination with any other material or process.

Mimaki Engineering Corporation assumes no legal responsibility for use or reliance upon this information.