


## SAFETY DATA SHEET

First Issue: Dec.05, 2016  
Revised Date: Jan.10, 2018

### **SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- 1.1 Product identifiers  
Product name: AB-T DUAL BRUSH PEN  
Product code: AB-T
- 1.2 Relevant identified uses of the substance or mixture and uses advised against  
General use: Marking pen for paper
- 1.3 Details of the supplier of the safety data sheet  
Manufacturer: Tombow Pencil Co., Ltd.  
Address: 6-10-12, Toshima, Kita-ku, Tokyo 114-8583, Japan  
TEL: +81-3-3912-1196  
FAX: +81-3-3912-1371
- 1.4 Emergency telephone number  
TEL (Japan): +81-3-3912-1196 (9am – 5:30pm, Japan Time, M-F)

### **SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
- 2.1.1 Classification according to GHS.  
All colours:  
Specific target organ toxicity - repeated exposure Category 2 (111-46-6)
- 2.1.2 Additional information: No
- 2.2 Label elements  
Labelling according to GHS.  
Hazard pictograms:
- All colours 
- Signal words: All colours: Warning
- Hazard statement:  
All colours:  
H373 Causes damage to organs through prolonged or repeated exposure
- Precautionary statements:  
All colours:

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P314	Causes severe skin burns and eye damage.
P501	Dispose of contents/container in accordance with local/regional/national/international regulation.

Supplemental Hazard information (EU): Not applicable.

2.3 Other hazards: No data available

### **SECTION 3: Composition/information on ingredients**

3.2 Mixtures

This product is composed of a combination of four components, body (article), brush (article), pen tip (article), and ink (mixture).

Body (Article): PP

Brush (Article): Nylon

Pen Tip (Article): PE

Ink (Mixture): The ink is a mixture and the composition is as follows.

Chemical Name	Chemical formula	CAS number	Concentration (wt%)
Water	H <sub>2</sub> O	7732-18-5	Trade secret
Diethylene glycol	C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>	111-46-6	Trade secret
Others	-	-	-

### **SECTION 4: First aid measures**

4.1 Description of first aid measures

General information: This product is marking pen for paper. Avoid any other uses.

Following inhalation: Remove victim to fresh air. Get medical advice/attention, if you feel unwell.

Following skin contact: Wash with soap and water.

Following eye contact: Rinse cautiously with water for several minutes. Get medical advice/attention, if you feel unwell.

Following ingestion: Rinse mouth. Get medical advice/attention, if you feel unwell.

Self-protective of the first aider: No data available

4.2 Most important symptoms and effects, both acute and delayed: No data available

4.3 Indication of any immediate medical attention and special treatment needed: No data available

### **SECTION 5: Firefighting measures**

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical powder, CO<sub>2</sub>, foam, sands, water spray

Unsuitable extinguishing media: No data available

5.2 Special hazards arising from the substance or mixture: No data available

5.3 Advice for firefighters: No data available

## **SECTION 6: Accidental release measures**

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel: Avoid contact with skin and eyes. Ensure adequate ventilation.

6.1.2 For emergency responders: No data available

6.2 Environmental precautions: Avoid discharge into water courses or onto the ground.

6.3 Methods and material for containment and cleaning up

6.3.1 For containment: Wipe off with waste cloths.

6.3.2 For cleaning up: Wipe off with waste cloths.

6.3.3 Other information: No data available

6.4 Reference to other sections: No data available

## **SECTION 7: Handling and storage**

7.1 Precautions for safe handling

Protective measures: Avoid contact with skin and eyes.

Measures to prevent fire: Keep away from heat, sparks and open flame.

Measures to prevent aerosol and dust generation: No data available

Measures to protect the environment: Avoid discharge into water courses or onto the ground.

Advice on general occupational hygiene: Avoid contact with skin and eyes.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Put the cap. Avoid high temperature. Keep away from heat, sparks and open flame.

Packaging materials: This product is composed of a combination of four components, body (article), brush (article), pen tip (article), and ink (mixture), and the body contains the mixture.

Requirements for storage rooms and vessels: Avoid high temperature. Keep away from heat, sparks and open flame.

7.3 Specific end use(s)

Recommendations: Marking pen for paper

**SECTION 8: Exposure controls/personal protection**

8.1 Control parameters

Occupational exposure limit: No data available

8.2 Exposure controls

8.2.1 Appropriate engineering controls: Usually, it is unnecessary.

8.2.2 Personal protective equipment: No data available

8.2.3 Environmental exposure controls: No data available

**SECTION 9: Physical and chemical properties**

9.1 Information on basic physical and chemical properties

a) Appearance

Physical state: Liquid

Colour: Various colours

b) Odour: Little

c) Odour threshold: No data available

d) pH: No data available

e) Melting point: about -5 °C

f) Initial boiling point and boiling range: (in case of water) about 100 °C

g) Flash point: No data available

h) Evaporation rate: No data available

i) Flammability (solid): No data available

j) Upper/lower flammability or explosive limits: No data available

k) Vapour pressure: No data available

l) Vapour density: No data available

m) Relative density: No data available

n) Solubility: Can be diluted with water.

o) Partition coefficient: n-octanol/water: No data available

p) Auto-ignition temperature: No data available

q) Decomposition temperature: No data available

r) Viscosity: No data available

s) Explosive properties: No data available

t) Oxidising properties: No data available

9.2 Other information: No data available

**SECTION 10: Stability and Reactivity**

10.1 Reactivity: Stable usually.

10.2 Chemical stability: Stable usually.

10.3	Possibility of hazardous reactions:	No data available
10.4	Conditions to avoid:	Heat, spark, and open flame
10.5	Incompatible materials:	No data available
10.6	Hazardous decomposition products:	No data available

### **SECTION 11: Toxicological information**

Acute toxicity:	111-46-6:	LD50 Oral - rat - 12.565 mg/Kg [1] LD50 Oral - Human - 1.000 mg/Kg Category 4 [1] LD50 Dermal - rabbit - 11.890 mg/Kg [1] Mixture (Calculated by GHS&HCS): Not categorized
Skin corrosion/Irritation:	111-46-6:	No skin irritation (Rabbit) [1] Mixture (Calculated by GHS&HCS): Not categorized
Serious eye damage/eye irritation:		Mixture (Calculated by GHS&HCS): Not categorized
Respiratory or skin sensitisation:	111-46-6:	Did not cause sensitisation on laboratory animals (Guinea pig) [1] Mixture (Calculated by GHS&HCS): Not categorized
Germ cell mutagenicity:		No data available
Carcinogenicity:		No data available
Reproductive toxicity:		No data available
Specific target organ toxicity - single exposure:		No data available
Specific target organ toxicity - repeated exposure:	111-46-6:	Category 2 (Kidney) [1] Mixture (Calculated by GHS): Category 2
Aspiration hazard:		No data available

### **SECTION 12: Ecological information**

12.1	Toxicity:	111-46-6:	LC50 - Pimephales promelas (fathead minnow) - 75.200 mg/L - 96 h [1] LC50 - Carassius auratus (goldfish) - 5.000 mg/L - 24 h [1] EC50 - Daphnia magna (Water flea) - > 10.000 mg/L - 24 h [1] Mixture (Calculated by GHS&HCS): Category3
12.2	Persistence and degradability:	111-46-6:	anaerobic - Exposure time 28 d Result: 90 - 100 % - Readily biodegradable. [1]
12.3	Bioaccumulative potential:	111-46-6:	Leuciscus idus melanotus - 3 d - 0,05 mg/l [1] Bioconcentration factor (BCF): 100 [1]
12.4	Mobility in soil:		No data available

- 12.5 Results of PBT and vPvB assessment:  
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
- 12.6 Other adverse effects: No data available

### **SECTION 13: Disposal considerations**

- 13.1 Waste treatment methods
- 13.1.1 Product / Packaging disposal:  
Dispose of contents/container in accordance with local/regional/national/international regulation.
- 13.1.2 Waste treatment-relevant information: No data available
- 13.1.3 Sewage disposal-relevant information: No data available
- 13.1.4 Other disposal recommendations: No data available

### **SECTION 14: Transport Information**

This product is not classified as a hazardous material by United Nations Recommendations on the Transport of Dangerous Goods.

- 14.1 UN number: Not Classified
- 14.2 UN proper shipping name: Not Classified
- 14.3 Transport hazard class: Not Classified
- 14.4 Packing group: Not Classified
- 14.5 Environmental hazards: Not Classified
- 14.6 Special precautions for user: No data available

### **SECTION 15: Regulatory information**

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture  
Observe local/regional/national/international regulation.
- 15.2 Chemical Safety Assessment  
No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

### **SECTION 16: Other information**

References: [1] SDS of Sigma-Aldrich

The above information is as of the date of issue, and is based on our present knowledge. However, the information shall not constitute any guarantees for any specific product features, and shall not establish any legally valid contractual relationships.