

SAFETY DATA SHEET

First Issue: Oct. 11, 2018

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

- 1.1 Product identifiers
Product name: TWIN TONE
Product code (Color No.): WS-PK03, 04, 06, 07, 13, 15, 17, 19, 21, 22, 25, 28, 33, 41, 42, 45, 48, 49, 50, 58, 60, 61, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86
- 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
Specific target organ toxicity - repeated exposure Category 2
- 2.1.2 Additional information: No
- 2.2 Label elements
Labelling according to GHS
Hazard pictograms:



- Signal words: Warning
- Hazard statement:
H373 Causes damage to organs through prolonged or repeated exposure
- Precautionary statements:
P260 Do not breathe dust/fume/gas/mist/vapors/spray.
P314 Causes severe skin burns and eye damage.

P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

2.3 Other hazards: No data available

SECTION 3: Composition/information on ingredients

3.2 Mixtures

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

Body (Article): PP

Pen Tip (Article): PE / POM

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

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

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, CO₂, 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 three components, body (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
	Color:	Various colors
	b) Odor:	Little
	c) Odor threshold:	No data available
	d) pH:	No data available
	e) Melting point:	No data available
	f) Initial boiling point and boiling range:	No data available
	g) Flash point:	No data available
	h) Evaporation rate:	No data available
	i) Flammability:	No data available
	j) Upper/lower flammability or explosive limits:	No data available
	k) Vapor pressure:	No data available
	l) Vapor density:	No data available
	m) Relative density:	about 1
	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) Oxidizing 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): Not categorized
Skin corrosion/Irritation:	111-46-6:	No skin irritation (Rabbit) [1]
Serious eye damage/eye irritation:	111-46-6:	No eye irritation (Rabbit) [1]
Respiratory or skin sensitization:	111-46-6:	Did not cause sensitization on laboratory animals (Guinea pig) [1] Mixture (Calculated by GHS): Not categorized
Germ cell mutagenicity:		No data available
Carcinogenicity:		
IARC:		No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
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:	
	Toxicity to fish	
		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]
	Toxicity to daphnia and other aquatic invertebrates	
		111-46-6: EC50 - Daphnia magna (Water flea) - > 10.000 mg/L - 24 h [1]
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.