TSUKINEKO

Safety Data Sheet
Delicata

according to UK REACH Regulation

Date: 19.11.2020 Revision date: 23.11.2023

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

1.1. Product identifier

Delicata

Further trade names / Item numbers

Golden Glitz (191), Silvery Shimmer (192), Celestial Copper (193), Bronze Burst (194), Champagne (196), Sapphire Blue (318), Emerald Green (321), Ruby Red (325), Pink Shimmer (333), Dark Brown Shimmer (354), Rose Gold (357), White Shimmer (380), Black Shimmer (382)

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Ink

Uses advised against

No information available.

1.3. Details of the supplier of the safety data sheet

Company name:	TSUKINEKO Co., Ltd
Street:	5F Suehiro JF Bldg., 5-1-5, Sotokanda Chiyoda-ku
Place:	Tokyo 101-0021, JAPAN
Telephone:	+81-3-3834-1080
e-mail:	info@tsukineko.co.jp
Internet:	www.tsukineko.co.jp
Responsible Department:	Product safety Mo-Fr (8:30-17:00 h)

1.4. Emergency telephone number: +81-3-3834-1080

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

2.2. Label elements

GB CLP Regulation

Special labelling of certain mixtures

EUH208 Contains triethanolamine; reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

EUH211 Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3. Other hazards

Results of PBT and vPvB assessment: not applicable.

Endocrine disrupting properties: No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Chemical characterization

Solvents, water, binder, colourants, additives (emulsifier, thickener/thickening agent, humectant, preservative)

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
112-27-6	2,2'-(ethylenedioxy)diethanol			< 10 %
	203-953-2		01-2119438366-35	
	Eye Irrit. 2; H319			
13463-67-7	titanium dioxide			≤ 5%
	236-675-5		01-2119489379-17	
	Carc. 2; H351 Note V, W, 10			
102-71-6	triethanolamine			< 1%
	203-049-8		01-2119486482-31	
	Skin Irrit. 2, Eye Irrit. 2, Skin Sens. 1, STOT SE 3; H315 H319 H317 H335			
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)			< 0.0015%
	-	613-167-00-5		
	Acute Tox. 2, Acute Tox. 2, Acute Tox. 3, Skin Corr. 1C, Eye Dam. 1, Skin Sens. 1A, Aquatic Acute 1, Aquatic Chronic 1; H330 H310 H301 H314 H318 H317 H400 H410 EUH071			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
112-27-6	203-953-2	2,2'-(ethylenedioxy)diethanol	< 10 %
	inhalation: LC50 ≥ 5.2 mg/l (dusts or mists); dermal: LD50 = 18080 mg/kg; oral: LD50 = 18080 mg/kg		
13463-67-7	236-675-5	titanium dioxide	≤ 5%
	oral: LD50 ≥ 2000 mg/kg		
102-71-6	203-049-8	triethanolamine	<1%
	dermal: LD50 ≥ 2000 mg/kg; oral: LD50 = 6400 mg/kg		
55965-84-9	-	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	<0.0015%
	inhalation: ATE = 0.5 mg/l (vapours); inhalation: ATE = 0.05 mg/l (dusts or mists);		

	dermal: ATE = 50 mg/kg; oral: LD50 = 53 mg/kg Skin Corr. 1C; H314: ≥ 0.6 - 100 Skin Irrit. 2; H315: ≥ 0.06 - < 0.6 Eye Dam. 1; H318: ≥ 0.6 - 100 Eye Irrit. 2; H319: ≥ 0.06 - < 0.6 Skin Sens. 1A; H317: ≥ 0.0015 - 100 Aquatic Acute 1; H400: M=100 Aquatic Chronic 1; H410: M=100	

Further Information

Note V: If the substance is to be placed on the market as fibres (with diameter < 3 µm, length > 5 µm and aspect ratio ≤ 3:1) or particles of the substance fulfilling the WHO fibre criteria or as particles with modified surface chemistry, their hazardous properties must be evaluated in accordance with Title II of this Regulation, to assess whether a higher category (Carc. 1B or 1A) and/or additional routes of exposure (oral or dermal) should be applied.

Note W: It has been observed that the carcinogenic hazard of this substance arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

Note 10: The classification as a „carcinogen by inhalation“ applies only to mixtures in powder form containing 1% or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice.

After inhalation

Provide fresh air.

After contact with skin

Wash with plenty of water/soap. If skin irritation occurs: Get medical advice/attention.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water.

In case of eye irritation consult an ophthalmologist.

After ingestion

Rinse mouth thoroughly with water.

4.2. Most important symptoms and effects, both acute and delayed

May produce an allergic reaction.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

No information available.

5.2. Special hazards arising from the substance or mixture

This material is combustible, but will not ignite readily.

5.3. Advice for firefighters

Wear self-contained breathing apparatus. Co-ordinate fire-fighting measures to the fire surroundings.

Additional information

Do not allow to enter into surface water or drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes and clothes.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

To clean the floor and all objects contaminated by this materials, use plenty of water.

Provide adequate ventilation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Handle and open container with care. Provide adequate ventilation.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Wash hands before breaks and after work. When using do not eat or drink.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Store in a cool dry place.

Hints on joint storage

No special measures are necessary.

Further information on storage conditions

Recommended storage temperature: at room temperature

7.3. Specific end use(s)

Ink for stamp pads

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
111-46-6	2,2'-Oxydiethanol	23	101		TWA (8 h)	WEL
1333-86-4	Carbon black	-	3.5		TWA (8 h)	WEL
		-	7		STEL (15 min)	WEL
56-81-5	Glycerol, mist	-	10		TWA (8 h)	WEL
12001-26-2	Mica, respirable	-	0.8		TWA (8 h)	WEL
12001-26-2	Mica, total inhalable	-	10		TWA (8 h)	WEL
1309-37-1	Rouge, respirable	-	4		TWA (8 h)	WEL
1309-37-1	Rouge, total inhalable	-	10		TWA (8 h)	WEL
-	Silica, amorphous, inhalable dust	-	6		TWA (8 h)	WEL
-	Silica, amorphous, respirable dust	-	2.4		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, respirable	-	4		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, total inhalable	-	10		TWA (8 h)	WEL

DNEL/DMEL values

CAS No	**Substance**			
DNEL type		Exposure route	Effect	Value
1309-37-1	Diiron trioxide			
Worker DNEL, long-term		**inhalation**	**local**	10 mg/m³
13463-67-7	titanium dioxide			
Worker DNEL, long-term		**inhalation**	**local**	0.17 mg/m³
Consumer DNEL, long-term		**inhalation**	**local**	0.028 mg/m³
1333-86-4	carbon black			
Worker DNEL, long-term		**inhalation**	**systemic**	1 mg/m³
Consumer DNEL, long-term		**inhalation**	**systemic**	0.06 mg/m³
111-46-6	diethylene glycol			
Worker DNEL, long-term		**inhalation**	**systemic**	44 mg/m³

Worker DNEL, long-term	**dermal**	**systemic**	43 mg/kg bw/day
Worker DNEL, long-term	**inhalation**	**local**	60 mg/m³
Consumer DNEL, long-term	**inhalation**	**systemic**	12 mg/m³
Consumer DNEL, long-term	**inhalation**	**local**	12 mg/m³
Consumer DNEL, long-term	**dermal**	**systemic**	21 mg/kg bw/day
102-71-6	triethanolamine		
Worker DNEL, long-term	**inhalation**	**systemic**	5 mg/m³
Worker DNEL, long-term	**inhalation**	**local**	5 mg/m³
Worker DNEL, long-term	**dermal**	**systemic**	6.3 mg/kg bw/day
Consumer DNEL, long-term	**inhalation**	**systemic**	1.25 mg/m³
Consumer DNEL, long-term	**inhalation**	**local**	1.25 mg/m³
Consumer DNEL, long-term	**dermal**	**systemic**	3.1 mg/kg bw/day
Consumer DNEL, long-term	**oral**	**systemic**	13 mg/kg bw/day

PNEC values

CAS No	Substance
Environmental compartment	Value
1333-86-4	carbon black
Freshwater	50 mg/l
102-71-6	triethanolamine
Freshwater	0.32 mg/l
Freshwater (intermittent releases)	5.12 mg/l
Marine water	0.032 mg/l
Freshwater sediment	1.7 mg/kg
Marine sediment	0.17 mg/kg
Micro-organisms in sewage treatment plants (STP)	10 mg/l
Soil	0.151 mg/kg

8.2. Exposure controls

Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tightly sealed safety glasses.

Hand protection

Wear protective gloves. Recommended material: NR (Natural rubber (Caoutchouc), Natural latex), NBR (Nitrile rubber), FKM (fluoro rubber), CR (polychloroprene, chloroprene rubber), Butyl caoutchouc (butyl rubber), PVC (polyvinyl chloride).

Breakthrough times and swelling properties of the material must be taken into consideration.

Skin protection

Lab coat, boots

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	various
Odour:	characteristic
Melting point/freezing point:	not determined
Boiling point or initial boiling point and boiling range:	>100 °C
Flammability:	not determined
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	>100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	not determined
pH-Value(at 20 °C):	6-8
Water solubility(at 20 °C):	miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not determined
Vapour pressure:	not determined
Density (at 20 °C):	~ 1 g/cm^3
Relative vapour density:	not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

The product is not explosive.

Oxidizing properties

The product is not oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solvent content:	43.5%
Solid content:	not determined

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

No information available.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
112-27-6	2,2'-(ethylenedioxy)diethanol				
	oral	LD50 18080mg/kg	Rat	IUCLID	
	dermal	LD50 18080mg/kg	Rabbit	IUCLID	
	inhalation (4 h) dust/mist	LC50 > 5.2 mg/l	Rat	IUCLID	
13463-67-7	titanium dioxide				
	oral	LD50 >2000mg/kg	Rat	IUCLID	
102-71-6	triethanolamine				
	oral	LD50 6400mg/kg	Rat	IUCLID	OECD 401
	dermal	LD50 >2000mg/kg	Rabbit	IUCLID	OECD 402
55965-84-9	reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)				
	oral	LD50 53mg/kg	Rat	literature value	
	dermal	ATE 50mg/kg			

	inhalation vapour	ATE 0.5mg/l			
	inhalation dust/mist	ATE 0.05mg/l			

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

Contains triethanolamine; reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

No information available.

Further information

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] | [d]	Species	Source	Method
112-27-6	2,2'-(ethylenedioxy)diethanol					
	Acute fish toxicity	LC50 >10000 mg/l	96 h	Lepomis macrochirus	IUCLID	
	Acute crustacea toxicity	EC50 62630 mg/l	48 h	Daphnia magna	IUCLID	
13463-67-7	titanium dioxide					
	Acute fish toxicity	LC50 >1000 mg/l	96 h	Pimephales promelas	IUCLID	
	Acute crustacea toxicity	EC50 >1000 mg/l	48 h	Daphnia magna	IUCLID	OECD 202
102-71-6	triethanolamine					
	Acute fish toxicity	LC50 11800 mg/l	96 h	Pimephales promelas	IUCLID	APHA method
	Acute crustacea toxicity	EC50 609.88 mg/l	48 h	Ceriodaphnia dubia	IUCLID	ASTM Designation E1192

	Acute bacteria toxicity	(EC50 >1000 mg/l)	3 h	Activated sludge	IUCLID	OECD TG 209

12. 2. Persistence and degradability

The polymer part of the product is poorly biodegradable. Polymers can be eliminated from water by abiotic processes, e.g. adsorption on activated sludge.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-27-6	2,2'-(ethylenedioxy)diethanol			
	OECD 301 C (O2 consumption)	83-96%	14	IUCLID
	Readily biodegradable (according to OECD criteria).			

12. 3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
102-71-6	triethanolamine	-1

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: No dangerous good in sense of this transport regulation.

14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.

14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.

14.4. Packing group: No dangerous good in sense of this transport regulation.

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75: not applicable

Information according to 2012/18/EU(SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revised due to Regulation (EU) No 2020/878

Abbreviations and acronyms

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

CAS: Chemical Abstracts Service

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimat

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

ADR: Accord européen sur le transport des marchandises dangereuses par Route

(European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Regulations concerning the international carriage of dangerous goods by rail

ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

IMDG: International Maritime Code for Dangerous Goods

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

Key literature references and sources for data

Relevant H and EUH statements (number and full text)

H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.
EUH208	Contains triethanolamine, reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Identified uses

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Inks and toners	C	-	18	-	-	-	-	Ink

LCS: Life cycle stages
SU: Sectors of use
PC: Product categories
PROC: Process categories
ERC: Environmental release categories
AC: Article categories
TF: Technical functions

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)