Trade name: INKU-DECO-1000-CL 1 L

Version: 5 / GB Date revised: 07.11.2019

Substance number: 3636009700401 Replaces Version: 4 / GB Print date: 20.07.20

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

1.1. Product identifier

INKU-DECO-1000-CL 1 L

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

Use of the substance/preparation

Cleaner for digital inks

Identified Uses

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites
PROC1 Chemical production or refinery in closed process without likelihood of exposure

or processes with equivalent containment conditions.

PROC2 Chemical production or refinery in closed continuous process with occasional controlled exposure or processes with equivalent containment conditions

PROC3 Manufacture or formulation in the chemical industry in closed batch processes

with occasional controlled exposure or processes with equivalent containment

condition

PROC4 Chemical production where opportunity for exposure arises

PROC5 Mixing or blending in batch processes

PROC8a Transfer of substance or mixture (charging and discharging) at nondedicated

facilities

PROC8b Transfer of substance or mixture (charging and discharging) at dedicated facilities

PROC10 Roller application or brushing

PROC11 Non industrial spraying

PROC13 Treatment of articles by dipping and pouring PROC19 Manual activities involving hand contact

ERC4 Industrial use of processing aids in processes and products, not becoming part of

articles

ERC8a Wide dispersive indoor use of processing aids in open systems
ERC8d Wide dispersive outdoor use of processing aids in open systems

Uses advised against

SU21 Consumer uses: Private households (= general public = consumers)

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

ROLAND DG EUROPE HOLDINGS B.V.

Prof. J.H. Bavincklaan 2 1183AT Amstelveen

Niederlande

Telephone no. +31 20 723 36 70

E-mail address of deu-demand-planning@rolanddg.com

person responsible

for this SDS

Information provided Department product safety

by / telephone

1.4. Emergency telephone number

24h: +49 228 19240 (Giftnotruf Bonn), +32 14 57 59 11 (Roland DG Benelux NV) (Only available during office hours.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms



Signal word

Warning

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P264.1 Wash hands thoroughly after handling.

P280 Wear protective gloves / protective clothing / eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice / attention.

2.3. Other hazards

No special hazards have to be mentioned.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Digital auxiliary based on water

Hazardous ingredients

2-(2-Butoxyethoxy)ethanol

CAS No. 112-34-5 EINECS no. 203-961-6

Concentration >= 10 < 25 %

Classification (Regulation (EC) No. 1272/2008)

Eye Irrit. 2 H319

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 attention. Never give anything by mouth to an unconscious person. If unconscious place in recovery position and seek medical advice.

After inhalation

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

After skin contact

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Remove contaminated clothing. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.

After eye contact

Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.

After ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

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

Until now no symptoms known so far.

4.3. Indication of any immediate medical attention and special treatment needed Hints for the physician / treatment

Treat symptomatically

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Recommended: alcohol resistant foam, CO2, powders, water spray/mist, Not be used for safety reasons: water jet

5.2. Special hazards arising from the substance or mixture

In the event of fire the following can be released: Carbon monoxide (CO); Carbon dioxide (CO2); dense black smoke; Sulphur oxides

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Cool closed containers exposed to fire with water. Do not allow run-off from fire fighting to enter drains or water courses.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid breathing vapours. Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Do not allow to enter drains or waterways. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations.

6.3. Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13). Clean preferably with a detergent - avoid use of solvents.

6.4. Reference to other sections

Information regarding Safe handling, see Section 7. Information regarding personal protective measures, see Section 8. Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid skin and eye contact. Avoid inhalation of vapour and spray mist. Smoking, eating and drinking shall be prohibited in application area. For personal protection see Section 8. Never use pressure to

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empty: container is not a pressure vessel. Always keep in containers of same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or water courses.

Classification of fires / temperature class / Ignition group / Dust explosion class

Temperature class T3

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in accordance with national regulation

Hints on storage assembly

Store away from oxidising agents, from strongly alkaline and strongly acid materials.

Further information on storage conditions

Store between 15 and 30 °C in a dry, well ventilated place. Keep container tightly closed. No smoking. Prevent unauthorised access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3. Specific end use(s)

Cleaner for digital inks

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

2-(2-Butoxyethoxy)ethanol

List EH40 Type WEL

Value 67.5 mg/m^3 10 ppm(V)Short term exposure limit 101.2 mg/m^3 15 ppm(V)

Status: 2011

Derived No/Minimal Effect Levels (DNEL/DMEL)

2-(2-Butoxyethoxy)ethanol

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Consentration

Worker

Short term
inhalative
Local effects

Concentration 101,2 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker
Duration of exposure Long term
Route of exposure dermal

Mode of action Systemic effects

Concentration 20 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group

Duration of exposure

Route of exposure

Mode of action

Worker

Long term

inhalative

Systemic effects

Concentration 67,5 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group Worker

Duration of exposure Long term

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Route of exposure inhalative
Mode of action Local effects

Concentration 67,5 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Short term
Route of exposure inhalative
Mode of action Local effects
Concentration 50.6

Concentration 50,6 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Long term Route of exposure dermal

Mode of action Systemic effects

Concentration 10 mg/kg/d

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Long term Route of exposure inhalative

Mode of action Systemic effects

Concentration 34 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Long term
Route of exposure inhalative
Mode of action Local effects
Concentration 34

Concentration 34 mg/m³

Type of value Derived No Effect Level (DNEL)

Reference group General Population

Duration of exposure Long term Route of exposure oral

Mode of action Systemic effects

Concentration 1,25 mg/kg/d

Predicted No Effect Concentration (PNEC)

2-(2-Butoxyethoxy)ethanol

Type of value PNEC Freshwater

Concentration 1 mg/l

Type of value PNEC
Type Saltwater

Concentration 0,1 mg/l

Type of value PNEC

Type Water (intermittent release)

Concentration 3,9 mg/l

Type of value PNEC

Type Freshwater sediment

Concentration 4 mg/kg

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Type of value PNEC

Type Marine sediment

Concentration 0,4 mg/kg

Type of value PNEC Type Soil

Concentration 0,4 mg/kg

Type of value PNEC

Type Sewage treatment plant (STP)

Concentration 200 mg/l

8.2. Exposure controls

Exposure controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

Respiratory protection

Not necessary.

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

For prolonged or repeated handling nitrile rubber gloves with textile undergloves are required.

Material thickness > 0,5 mm Breakthrough time < 30 min

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin, they should however not be applied once exposure has occurred.

Eye protection

Use safety eyewear designed to protect against splash of liquids.

Body protection

Not applicable.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Form Liquid
Colour transparent
Odour mild

Odour threshold

Remarks No data available

pH value

Remarks not determined

Melting point

Remarks not determined

Freezing point

Remarks not determined

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Initial boiling point and boiling range

°C Value appr. 100

1.013 Pressure hPa

Source Literature value

Flash point

Value °C

Method ASTM D 6450 (CCCFP)

Evaporation rate (ether = 1):

Remarks not determined

Flammability (solid, gas)

Not applicable

Upper/lower flammability or explosive limits

Lower explosion limit appr. 0.9 %(V) Upper explosion limit appr. 28,5 %(V)

Source Literature value

Vapour pressure

not determined Remarks

Vapour density

not determined Remarks

Density

Value 1,036 g/cm³

Temperature °C 20

DIN EN ISO 2811 Method

Solubility in water

Remarks miscible Partition coefficient: n-octanol/water

Not applicable

Remarks

Ignition temperature Value appr. 225 °C

Source Literature value

Viscosity

dynamic

Value 3 appr. 5 mPa.s

Temperature 20 °C

Explosive properties

evaluation nο

Oxidising properties

evaluation None known

9.2. Other information

Other information

The physical specifications are approximate values and refer to the used safety relevant component(s).

SECTION 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions when stored and handled according to prescribed instructions.

10.2. Chemical stability

Stable under recommended storage and handling conditions (see section 7).

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10.3. Possibility of hazardous reactions

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

10.4. Conditions to avoid

When exposed to high temperatures may produce hazardous decomposition products.

10.5. Incompatible materials

No hazardous reactions when stored and handled according to prescribed instructions.

10.6. Hazardous decomposition products

See chapter 5.2 (Firefighting measures - Special hazards arising from the substance or mixture).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity

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

Acute oral toxicity (Components)

2-(2-Butoxyethoxy)ethanol

Species rat

LD50 4500 mg/kg

Acute dermal toxicity

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

Acute dermal toxicity (Components)

2-(2-Butoxyethoxy)ethanol

Species rabbit

LD50 2700 mg/kg

Acute inhalational toxicity

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

Skin corrosion/irritation

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

Serious eye damage/irritation

evaluation irritant

Remarks The classification criteria are met.

Sensitization

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

Mutagenicity

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

Reproductive toxicity

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

Carcinogenicity

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

Specific Target Organ Toxicity (STOT)

Single exposure

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

Repeated exposure

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

Aspiration hazard

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

Experience in practice

Exposure to component solvents vapours concentration in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on kidney, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and in extreme cases, loss of consciousness. Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin. The liquid splashed in the eyes may cause irritation and reversible damage. Ingestion may cause nausea, diarrhoea and vomiting. This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Other information

There are no data available on the mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

General information

There are no data available on the mixture itself.Do not allow to enter drains or water courses.The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as dangerous for the environment.

Fish toxicity (Components)

2-(2-Butoxyethoxy)ethanol

Species Bluegill (Lepomis macrochirus)

1300 mg/l

Duration of exposure 96 h

12.2. Persistence and degradability

General information

There are no data available on the mixture itself.

12.3. Bioaccumulative potential

General information

There are no data available on the mixture itself.

Partition coefficient: n-octanol/water

Remarks Not applicable

12.4. Mobility in soil

General information

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

General information

There are no data available on the mixture itself.

12.6. Other adverse effects

General information

There are no data available on the mixture itself.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Disposal recommendations for the product

Do not allow to enter drains or water courses.

Wastes and emptied containers should be classified in accordance with relevant national regulation.

The European Waste Catalogue classification of this product, when disposed of as waste is EWC waste code 08 03 12* waste ink containing dangerous substances

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information contact your local waste authority.

Disposal recommendations for packaging

Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers.

Empty containers must be scrapped or reconditioned.

Not emptied containers are hazardous waste (waste code number 150110).

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
14.1. UN number	The product does not constitute a hazardous substance in land transport	The product does not constitute a hazardous substance in sea transport	The product does not constitute a hazardous substance in air transport
14.2. UN proper shipping name	-	-	-
14.3. Transport hazard class(es)	-	-	-
Subsidiary risk		-	-
Label			
14.4. Packing group	-	-	-
Transport category	0		
14.5. Environmental hazards		no	
	-		-

Information for all modes of transport

14.6. Special precautions for user

Transport within the user's premises:

Always transport in closed containers that are upright and secure.

Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Other information

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code no

SECTION 15: Regulatory information

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

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VOC

VOC (EU) 15 %

VOC (EU) 155,4 g/l

Other information

All components are contained in the TSCA inventory or exempted.

All components are contained in the DSL inventory.

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has not been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H319 Causes serious eye irritation.

CLP categories listed in Chapter 3

Eye Irrit. 2 Eye irritation, Category 2

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: *** This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship. The information in this Safety Data Sheet is based on the present state of knowledge and current legislation.

It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications.

The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions.

As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with.

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.