SAFETY DATA SHEET

Spittoon absorber liquid set A

IP7-232

OKI DATA CORPORATION

Issuing Date: 1 April, 2018

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Product Name : Spittoon absorber liquid set A
Product Code : IP7-232

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

1.3 Details of the supplier of the safety data sheet

Manufacturer's Name : OKI Data Corporation
4-11-22 Shibaura, Minato-ku, Tokyo , Japan
Tel: +81-(0)3-5445-6111

Distributor: OKI EUROPE Limited
Blays House, Wick Road, Egham, Surrey, TW20 0HJ, United Kingdom
+44 (0)20 8219 2190

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
<Regulation (EC) No. 1272/2008>
Classification
Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements
<Regulation (EC) No. 1272/2008>
Hazard pictograms

Signal word: Danger
Hazard statements Causes serious eye damage.
Precautionary statements
Prevention: Wear eye protection/ face protection.
Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician.
Hazardous components which must be listed on the label:
γ-butyrolactone

2.3 Other hazards
None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Main Ingredients	Content(%)	CAS-No.	EC-No.	Registration number	Classification (REGULATION (EC) No 1272/2008)
2-(2-butoxyethoxy)ethyl acetate	85-95	124-17-4	204-685-9	-	None
γ-butyrolactone	5-15	96-48-0	202-509-5	-	Acute Tox. 4; H302

					Eye Dam. 1; H318 STOT SE 3; H336

4. FIRST-AID MEASURES

4.1 Description of first aid measures

General advice:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
Protection of first-aiders:	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.
If inhaled:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact:	Wash with water and soap as a precaution. Get medical attention if symptoms occur.
In case of eye contact:	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lens, if worn. Get medical attention immediately
If swallowed:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water

4.2 Most important symptoms and effects, both acute and delayed

Risks:	Causes serious eye damage.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment:	Treat symptomatically and supportively

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:	Water spray Alcohol-resistant foam Dry chemical Carbon dioxide (CO2)
Unsuitable Extinguishing Media	
	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting:	Exposure to combustion products may be a hazard to health.
Hazardous combustion products:	Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.
Specific extinguishing methods:	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Cool containers/tanks with water spray. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:	Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

6.2 Environmental precautions

Environmental precautions:	Discharge into the environment must be avoided. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g. by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up:	Soak up with inert absorbent material. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Technical measures:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation:	Use only with adequate ventilation.
Advice on safe handling:	Avoid inhalation of vapour or mist. Do not swallow. Do not get in eyes. Avoid prolonged or repeated contact with skin. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Take care to prevent spills, waste and minimize release to the environment.
Hygiene measures:	Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:	Keep in properly labelled containers. Keep tightly closed.
Advice on common storage:	Do not store with the following product types: Strong oxidizing agents

7.3 Specific end use(s)

Specific use(s):	No data available

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

2-(2-butoxyethoxy)ethyl acetate	Fresh water Value: 0.108 mg/l Marine water Value: 0.0108 mg/l Intermittent use/release Value: 0.6 mg/l Fresh water sediment Value: 0.8 mg/kg Marine sediment Value: 0.8 mg/kg Soil Value: 0.29 mg/kg Oral Value: 70 mg/kg
γ-butyrolactone:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 130 mg/m3 End Use: Workers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 958 mg/m3 End Use: Workers Exposure routes: Skin contact Potential health effects: Long-term systemic effects Value: 19 mg/kg End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 28 mg/m3 End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 340 mg/m3 End Use: Consumers Exposure routes: Skin contact Potential health effects: Long-term systemic effects Value: 8 mg/kg End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 8 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

2-(2-butoxyethoxy)ethyl acetate	Fresh water Value: 0.304 mg/l Marine water Value: 0.0304 mg/l Intermittent use/release Value: 0.56 mg/l Sewage treatment plant Value: 90 mg/l Fresh water sediment Value: 2.03 mg/kg Marine sediment

	Value: 0.203 mg/kg Soil Value: 0.68 mg/kg Oral Value: 0.06 g/kg
γ-butyrolactone:	Fresh water Value: 0.056 mg/l Marine water Value: 0.0056 mg/l Intermittent use/release Value: 0.56 mg/l Sewage treatment plant Value: 452 mg/l Fresh water sediment Value: 0.24 mg/kg Marine sediment Value: 0.02 mg/kg Soil Value: 0.0147 mg/kg

8.2 Exposure controls

Engineering measures:	Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations.

Personal protective equipment

Eye protection:	Wear the following personal protective equipment: Chemical resistant goggles must be worn. If splashes are likely to occur, wear:Face-shield

Hand protection

Material:	Impervious gloves Flame retardant gloves
Remarks:	Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous substance and specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.
Skin and body protection:	Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential. Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).
Respiratory protection	Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
Filter type:	Organic vapour type (A)

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance:	liquid
Color:	colorless
Odor	solvent-like
Odor Threshold:	No data available
pH:	No data available

Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point:	116 °C Method: Seta closed cup
Evaporation rate:	No data available
Flammability (solid, gas)	Not applicable
Upper explosion limit:	10.7 %(V) (135 °C)
Lower explosion limit:	0.7 %(V) (93 °C)
Vapour pressure:	No data available
Relative vapour density:	No data available
Density:	0.98-1.02g/cm3
Water solubility:	65 g/l partly soluble
Partition coefficient: n-octanol/water:	Not applicable
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Viscosity, dynamic:	No data available
Explosive properties:	Not explosive
Oxidizing properties:	The substance or mixture is not classified as oxidizing.

9.2 Other information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

Not classified as a reactivity hazard.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: Can react with strong oxidizing agents.

10.4 Conditions to avoid

Conditions to avoid: None known.

10.5 Incompatible materials

Materials to avoid: Oxidizing agents

10.6 Hazardous decomposition products

No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of exposure:	Inhalation, Skin contact, Ingestion, Eye contact
Acute toxicity:	Not classified based on available information.
Product:	
Acute oral toxicity:	Acute toxicity estimate : > 2,000 mg/kg Method: Calculation method

Components:
γ-butyrolactone:
Acute oral toxicity: LD50 (Rat): 1,582 mg/kg
Acute dermal toxicity: LC50 (Rat): > 5.1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Skin corrosion/irritation: Not classified based on available information.
Components:
γ-butyrolactone:
Species: Rabbit
Result: No skin irritation

Serious eye damage/eye irritation: Causes serious eye damage.
Components:
γ-butyrolactone:
Species: Rabbit
Method: OECD Test Guideline 405
Result: Irreversible effects on the eye

Respiratory or skin sensitization:
Skin sensitisation: Not classified based on available information.
Respiratory sensitisation: Not classified based on available information.
Components:
γ-butyrolactone:
Test Type: Local lymph node assay (LLNA)
Exposure routes: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: negative

Germ cell mutagenicity Not classified based on available information.
Components:
γ-butyrolactone:
Genotoxicity in vitro
Test Type: Bacterial reverse mutation assay (AMES)
Result: negative

Carcinogenicity Not classified based on available information.
Components:
γ-butyrolactone:
Species: Rat
Application Route: Ingestion
Exposure time: 103 weeks
Result: negative

Reproductive toxicity Not classified based on available information.
Components:
γ-butyrolactone:
Effects on fertility

Test Type:	Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species:	Rat
Application Route:	Ingestion
Method:	OECD Test Guideline 422
Result:	negative
Remarks:	Based on data from similar materials

Effects on foetal development

Test Type:	Embryo-foetal development
Species:	Rat
Application Route:	Ingestion
Result:	negative

STOT - single exposure: Not classified based on available information.

Components:

γ-butyrolactone:

Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure: Not classified based on available information.

Repeated dose toxicity

Components:

γ-butyrolactone:

Species:	Rat
NOAEL:	225 mg/kg
Application Route:	Ingestion
Exposure time:	13 w

Aspiration toxicity: Not classified based on available information.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Components:

γ-butyrolactone:

Toxicity to fish:	LC50 (Lepomis macrochirus (Bluegill sunfish)): 56 mg/l Exposure time: 96 h
Toxicity to daphnia and other aquatic invertebrates:	EC50 (Daphnia magna (Water flea)): > 500 mg/l Exposure time: 48 h
Toxicity to algae:	EC50 (Desmodesmus subspicatus (green algae)): > 500 mg/l Exposure time: 72 h NOEC (Desmodesmus subspicatus (green algae)): 31.25 mg/l Exposure time: 72 h
Toxicity to bacteria:	IC50 : 4,518 mg/l Exposure time: 40 h

12.2 Persistence and degradability

Components:

γ-butyrolactone:

Biodegradability:	Result: Readily biodegradable. Biodegradation: 77 % Exposure time: 14 d Method: OECD Test Guideline 301C

12.3 Bioaccumulative potential

Components:

γ-butyrolactone:

Partition coefficient: n-octanol/water: log Pow: -0.566

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product:	Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.
Contaminated packaging:	Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

15. REGULATORY INFORMATION

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

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals:	Not applicable
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).:	Not applicable
Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:	Not applicable
Regulation (EC) No 850/2004 on persistent organic pollutants:	Not applicable
Seveso II - Directive 2003/105/EC amending Council Directive	

96/82/EC on the control of major-accident hazards involving dangerous substances: Not applicable

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION

Full text of H-Statements

H302: Harmful if swallowed.

H318: Causes serious eye damage.

H336:May cause drowsiness or dizziness.

Full text of other abbreviations

Acute Tox.:	Acute toxicity.
Eye Dam.:	Serious eye damage.
STOT SE:	Specific target organ toxicity - single exposure.

Further information

Sources of key data used to compile the Safety Data Sheet:

Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agency, http://echa.europa.eu/

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