

# SAFETY DATA SHEET

Spittoon absorber liquid set

IP7-162

**OKI DATA CORPORATION**



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
$\gamma$ -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.
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##### 4.3 Indication of any immediate medical attention and special treatment needed

Treatment:	Treat symptomatically and supportively
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#### 5. FIRE-FIGHTING MEASURES

##### 5.1 Extinguishing media

Suitable extinguishing media:	Water spray Alcohol-resistant foam Dry chemical Carbon dioxide (CO <sub>2</sub> )
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##### 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 In the event of fire, wear self-contained breathing apparatus.

for firefighters:	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.

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## 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.
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### 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.
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### 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.
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### 6.4 Reference to other sections

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

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## 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

Contains no substances with occupational exposure limit values.

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/m <sup>3</sup> End Use: Workers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 958 mg/m <sup>3</sup> 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/m <sup>3</sup> End Use: Consumers Exposure routes: Inhalation Potential health effects: Acute systemic effects Value: 340 mg/m <sup>3</sup> 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	Fresh water
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acetate 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)

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## 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/cm <sup>3</sup>
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

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## 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.

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## 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: log Pow: -0.566  
n-octanol/water:

#### 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

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### 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.

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### 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.

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### 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 Not applicable the Council concerning the export and import of dangerous chemicals:

REACH - Candidate List of Substances of Very High Concern Not applicable for Authorisation (Article 59):

Regulation (EC) No 1005/2009 on substances that deplete the Not applicable ozone layer:

Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable

Seveso II - Directive 2003/105/EC amending Council Directive Not applicable 96/82/EC on the control of major-accident hazards involving dangerous substances:

### 15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

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## 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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