SAFETY DATA SHEET (SDS)

Revision date: 05/18

SDS – 018
Revision number: 01
Rev. 05/18

SPOTCHEM™ II GOT
Part Numbers: SE77110 and 77139

For use with the SPOTCHEM EZ Analyzer SP-4430

ARKRAY USA, Inc.
5182 West 76th Street
Minneapolis, Minnesota 55439

Technical Customer Service Phone:
1-855-646-3108
SAFETY DATA SHEET

SDS No. : 77404EU
Issue Date : 18 Mar. 1998
Revision Date : 31 Jan. 2017

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name : SPOTCHEM II GOT

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

The product is applicable for the following purpose of use only. Use exclusive reagents for SPOTCHEM analyzer.

1.3 Details of the supplier of the safety data sheet

ARKRAY FACTORY, Inc.
Address : 1480 Koji, Konan-cho, Koka-shi, Shiga 520-3306, JAPAN
Phone : +81-748-86-6901
Facsimile : +81-748-86-5347

European representative
ARKRAY Europe, B. V.
Address : Prof. J. H. Bavincklaan 2, 1183 AT Amstelveen, THE NETHERLANDS
Phone : +31-20-545-2450
Facsimile : +31-20-545-2459

1.4 Emergency telephone number

Emergency phone : +31-20-545-2450

2. Hazards Identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to REGULATION (EC) No 1272/2008.

2.2 Label elements

The product does not need to be labeled in accordance with EC directives or respective national laws.

2.3 Other hazards

May be harmful if ingested.
May cause eyes and skin irritation.

3. Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th>Component</th>
<th>Conc. [%]</th>
<th>Formula</th>
<th>EINECS No.</th>
<th>CAS No.</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium L-aspartate</td>
<td>&lt; 1.0</td>
<td>C4H6O4NNa • H2O</td>
<td>223-264-0</td>
<td>3792-50-5</td>
<td></td>
</tr>
<tr>
<td>α-Ketoglutaric acid</td>
<td>&lt; 0.1</td>
<td>C5H6O5</td>
<td>206-330-3</td>
<td>328-50-7</td>
<td>Skin Irrit. 2; H315, Eye Irrit. 2A; H319</td>
</tr>
<tr>
<td>Oxalacetic acid decarboxylase (OAC)</td>
<td>&lt; 0.01</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td></td>
</tr>
<tr>
<td>Pyruvate oxidase (POP)</td>
<td>&lt; 0.1</td>
<td>—</td>
<td>232-644-5</td>
<td>9001-96-1</td>
<td>—</td>
</tr>
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</tr>
<tr>
<td>4-Aminoantipyrine (4-AAP)</td>
<td>&lt; 0.01</td>
<td>C_{13}H_{19}N_{3}O</td>
<td>201-452-3</td>
<td>83-07-8</td>
<td>Acute Tox. (Oral) 4; H302, Skin Irrit. 2; H315, Eye Irrit. 2; H319</td>
</tr>
<tr>
<td>N-Ethyl–N-(2-hydroxy -3-sulfo propyl)-3,5-dimethoxyxaniline sodium salt (DAOS)</td>
<td>&lt; 0.01</td>
<td>C_{13}H_{20}NNaO_{5}S</td>
<td>—</td>
<td>83777-30-4</td>
<td>—</td>
</tr>
<tr>
<td>Peroxidase (POD)</td>
<td>&lt; 0.01</td>
<td>—</td>
<td>232-668-6</td>
<td>9003-99-0</td>
<td>Skin Irrit. 2; H315, Eye Irrit. 2; H319, Repr. 1B; H360, STOT SE (central nervous system, alimentary canal) 1; H370, STOT SE (respiratory tract irritation) 3; H335, STOT RE (kidney) 1; H372</td>
</tr>
<tr>
<td>Thiamine pyrophosphate acid (TPP)</td>
<td>&lt; 0.01</td>
<td>C_{12}H_{19}ClN_{4}O_{7}P_{2}S</td>
<td>205-836-1</td>
<td>154-87-0</td>
<td>—</td>
</tr>
<tr>
<td>Magnesium chloride</td>
<td>&lt; 0.01</td>
<td>MgCl_{2}</td>
<td>232-094-6</td>
<td>7786-30-3</td>
<td>Skin Irrit. 3; H316, Eye Irrit. 2A; H319</td>
</tr>
</tbody>
</table>

4. First aid measures

4.1 Description of first aid measures

Inhalation
Not applicable

Skin contact
Immediately wash thoroughly with water and soap. Immediately get medical attention if itchiness and inflammation occurs.

Eye contact
Immediately wash eyes with plenty of clean water for at least 15 minutes and get medical attention.

Ingestion
Rinse mouth. Give one or two glasses of water to drink

4.2 Most important symptoms and effects, both acute and delayed
No relevant information available

4.3 Indication of any immediate medical attention and special treatment needed
No relevant information available

5. Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water

Unsuitable extinguishing media

No relevant information available

5.2 Special hazards arising from the substance or mixture

No relevant information available

5.3 Advice for firefighters

No relevant information available

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No information available

For emergency responder

Wear protective gloves.

6.2 Environmental precautions

No relevant information available

6.3 Methods and material for containment and cleaning up

Pick up the product and wipe the contaminated area with damp cloth. Rinse the used cloth.

6.4 Reference to other sections

Not available

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures (Exposure Control for handling personnel)

No relevant information available

7.2 Conditions for safe storage, including any incompatibilities

Store the product in a refrigerator at temperature of 2 - 8 °C.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

No data available

8.2 Exposure controls

Appropriate engineering controls

No information available

Individual protection measures, such as personal protective equipment

Eye/face protection

Use safety glasses, if necessary.

Skin protection

Hand protection

Use rubber gloves, if necessary

Other
9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Appearance**: Solid
- **Odour**: No data available
- **Odour threshold**: No data available
- **pH**: No data available
- **Melting point/freezing point**: No data available
- **Boiling point and boiling range**: No data available
- **Flash Point**: No data available
- **Evaporation rate**: No data available
- **Flammability**: No data available
- **Upper/lower flammability or explosive limits**: No data available
- **Vapor pressure**: No data available
- **Vapor density**: No data available
- **Solubility in**
- **Partition coefficient: n-octanol/water**: No data available
- **Auto-ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Viscosity**: No data available

9.2 Other information

No further relevant information

10. Stability and reactivity

10.1 Reactivity

Stable under normal conditions

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

None

10.4 Conditions to avoid

Sunlight, heat, and humidity

10.5 Incompatible materials
11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity No information available
Skin corrosion/irritation No information available
Serious eye damage/irritation No information available
Respiratory or skin sensitization No information available
Germ cell mutagenicity No information available
Carcinogenicity
Reproductive toxicity No information available
STOT-single exposure No information available
STOT-repeated exposure No information available
Aspiration hazard No information available

12. Ecological information

12.1 Toxicity
No information available

12.2 Persistence and degradability
No information available

12.3 Bioaccumulative potential
No information available

12.4 Mobility in soil
No information available

12.5 Results of PBT and vPvB assessment
No information available

12.6 Other adverse effects
No information available

13. Disposal considerations

13.1 Waste treatment methods

Product
Dispose of the product in accordance with regulations.

Contaminated packaging
Dispose as of unused product.

Others
If used product, ask a licensed disposal company.
Observe all federal, state, and local environmental regulation.

14. Transport information

14.1 UN number
14. UN proper shipping name
ADR/RID: —    IMDG: —    IATA: —

14.3 Transport hazard class(es)
ADR/RID: —    IMDG: —    IATA: —

14.4 Packing group
ADR/RID: —    IMDG: —    IATA: —

14.5 Environmental hazards
ADR/RID: no    IMDG Marine pollutant: no    IATA: no

14.6 Special precautions for user
No relevant information available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
No relevant information available

15. Regulatory information
The safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health, and environmental regulations/legislation specific for the substance or mixture
No information available

15.2 Chemical safety assessment
No information available

16. Other information
The date of preparation and revision of the SDS
Revised on 25 August 2000: Changed the Company name from “KDK corporation” to “ARKRAY, Inc.”
Revised on 10 December 2002: Modified in accordance with the requirements of Directive 2001/58/EC.
Revised on 22 October 2003: Changed the Manufacturer from “ARKRAY FACTORY” to “ARKRAY, Inc” in “Company information.”
Revised on 1 November 2005: Changed the Manufacturer from “ARKRAY, Inc” to “ARKRAY FACTORY” in “Company information.”
Revised on 8 January 2010: Changed Telephone number & Facsimile number of the Manufacturer in “Company information.”
Revised on 1 July 2010: Modified to fit with ISO11014-1.
Revised on 20 October 2011: Revised “3.COMPOSITION / INFORMATION ON INGREDIENTS.”
Revised on 2 December 2011: Revised “3.COMPOSITION / INFORMATION ON INGREDIENTS.”
Revised on 1 June 2015: Modified in accordance with the requirements of Regulation (EC) No. 1907/2006.
Revised on 1 December 2015: European representative’s address has changed.
Revised on 31 January 2017: Corrected the wording in 15.1.
Clarified concentration in Composition/Information on ingredients.

Key literature references
Insert
Further information

The above information contained herein is based on the data available to us and is believed to be correct. However, ARKRAY, Inc. bears no warranty expresses or implies regarding the accuracy of these data or the results to be obtained from the use thereof.

ARKRAY, Inc. assumes no responsibility for injury caused from the use of the product described herein.