

## Safety Data Sheet

Reference No. 1007

Issue: 12<sup>th</sup> October 1995  
Revision: 1<sup>st</sup> September 2015

### 1. Chemical product and company identification

Product name WATER it Test Kit Zinc

Type WA-Zn

Company name OPTEX CO.,LTD.  
Address 5-8-12, Ogoto Otsu Shiga 520-0101, Japan  
Tel +81-77-579-8100  
Fax +81-77-579-8136  
Section Quality Control Dept.

Recommended uses and restrictions Reagent for water quality measurement

### 2. Hazards identification

#### [GHS Classification]

Physical hazards: Classification not possible (no data for GHS classification available)

Health hazards:

Serious eye damage/ eye irritation: Category 2  
Specific target organ toxicity (single exposure):  
Category 2 (stomach)

For those health hazards not listed above are not classified or classification not possible (no data for GHS classification available)

Environmental hazards: Classification not possible (no data for GHS classification available)

#### [GHS labeling elements]



#### [Signal word]

Warning

#### [Hazard statements]

Causes serious eye irritation.  
May cause damage to organs (stomach).

#### [Precautionary statements]

Keep out of reach of children and store in the cool, dry, and dark place.  
Carefully read instructions before use and do not use for other purposes.  
Wear personal protective equipment if necessary.  
Do not inhale reagents.  
Wash contaminated clothing.  
Wash hands well before and after handling.  
Avoid release to the environment.

### 3. Composition/ information on ingredients

Discrimination of single substance or mixture: Mixture

Reagent name	K-1 reagent				
Chemical name	1-(2-Pyridylazo)-2-naphthol	Silicon dioxide	Buffering agent	Other ingredient	Polyethylene
Content	<0.1%	< 0.2%	<5%	< 10%	> 84.7%
Chemical formula	C <sub>15</sub> H <sub>11</sub> N <sub>3</sub> O	SiO <sub>2</sub>	—	—	(C <sub>2</sub> H <sub>4</sub> ) <sub>n</sub>
METI No. (reference number under CSCL in Japan)	—	(1)-548	—	—	(6)-1
CAS No.	85-85-8	7631-86-9	—	—	9002-88-4

### 4. First-aid measures

If reagents or test solutions;

Enter in eyes: Immediately rinse thoroughly.

Contact with skin: Immediately wash out contaminated site with plenty of water.

Enter into mouth: Immediately rinse mouth with plenty of water.

If ingested or in case any symptoms appear after above measures, immediately get medical advice or treatment.

### 5. Fire-fighting measures

Extinguishing methods: Cut off ignition sources and extinct by a suitable media.

Suitable extinguishing media: Water (mist), powder, carbon dioxide, dry sand.

### 6. Accidental release measures

In case of outdoor use: avoid spill of reagents and waste solutions.

In case of indoor use: if spilled on a table or floor, wipe off immediately spilled reagents and dispose of them.

### 7. Handling and storage

Handling: Care should be made so that reagents and test solutions will not contact with eyes and skin and to avoid ingestion.

Especially for outdoor use, ensure to bring back reagents, waste solutions after the measurement and used containers.

Storage: Avoid direct sunlight and store in a well-ventilated, dark, dry and cool place.

### 8. Exposure controls and personal protection

Administrative control level

Working environment standard: Not established

Occupational exposure limits

Japan Society for Occupational health: Not established

ACGIH (TLVs): TWA 0.1 mg/m<sup>3</sup> (only SiO<sub>2</sub>)OSHA (PEL): 8H TWA 10 mg/m<sup>3</sup> (%resp SiO<sub>2</sub>)<sup>3</sup>(only SiO<sub>2</sub>)

Protective equipment: Recommended to wear protective glasses and gloves

## 9. Physical and chemical properties

Physical state: Tube containing powder reagent  
1.2 g x 50 tubes/kit, aluminum laminate packaging each of 5 tubes  
Color: Orange (powder), semi-transparent (polyethylene tube)  
Odor: No odor  
pH: 10

Melting point, boiling point, flash point, ignition point, lower explosion limit, vapor pressure, density, relative density, solubility, Pow, kinetic viscosity: not available as a mixture

## 10. Stability and reactivity

Avoid leaving in a place where high temperature, humid or under direct sunlight.  
Stable under normal use conditions and no dangerous reactions under specific conditions are expected.  
No information on hazardous decomposition product is available.

## 11. Toxicological information

No data on mixture is available. Data on each substance are shown below.

1-(2-Pyridylazo)-2-naphthol:  
No data regarding health hazard is available.

Silicon dioxide:  
Acute toxicity: Oral: Rat LD<sub>50</sub> : 3,160 mg/kg, Intraperitoneal: Rat LDLo: 50 mg/kg,  
Intravenous: Rat LD<sub>50</sub> : 15 mg/kg, Intratracheal: Rat LDLo: 10 mg/kg  
Carcinogenicity: IARC Group 3 (not classifiable as to carcinogenicity to humans).  
Other data: Not available

Polyethylene:  
Acute toxicity:  
Oral: Rat LD<sub>50</sub> > 7,950 mg/kg (used 7,950 mg/kg for the calculation of ATEmix below)  
Carcinogenicity: IARC Group 3 (not classifiable as to carcinogenicity to humans).  
Other data: Not available

GHS classifications as a mixture are shown below.

[Acute toxicity (oral)]  
Not classified based on application of the additive equation of LD<sub>50</sub> values of each ingredient.  
[Serious eye damage/ eye irritation]  
Buffering agent contains  $\geq 3\%$  of category 2; Category 2 (Warning, Causes serious eye irritation.)  
[Specific target organ toxicity (single exposure)]  
Buffering agent contains  $\geq 1\%$ , <10% of STOT (stomach) substance; Category 2 (Warning, May cause damage to organs (stomach).)

[Skin corrosion/ irritation], [Respiratory or skin sensitization], [Germ cell mutagenicity], [Carcinogenicity], [Reproductive toxicity], [Specific target organ toxicity (repeated exposure)], [Aspiration hazard]  
Above classifications are not possible because of lack of data.

## 12. Ecological information

No data on mixture is available. Data on each substance are shown below.  
1-(2-Pyridylazo)-2-naphthol, Silicon dioxide, Polyethylene: No eco-toxicological information available.

GHS classifications as a mixture are shown below.

[Hazardous to the aquatic environment acute], [Hazardous to the aquatic environment chronic]:  
Classifications are not possible because of lack of data.

[Harmful effects on the ozone layer]:  
Classification is not possible because each of the substances is not described in Annex to Montreal Protocol.

### 13. Disposal considerations

Since waste solution in tube is alkali, pH = 10.  
Always dispose of in accordance with local regulations.

### 14. Transport information

In addition to precautionary measures regarding handling and storage, avoid rough handling so as not to break containers. It is recommended to ship by air because under high temperature for long period may lead to deterioration.

UN classification and number: Not applicable  
Civil Aeronautics Act: Not applicable  
Poisonous and Deleterious Substances Control Act:  
Not applicable  
Fire Service Act: Not applicable  
Total weight of the product: ca.150 g/kit

### 15. Regulatory information

PRTR Act: Not applicable  
Industrial Safety and Health Act: Applicable  
This product contains more than 0.1% of Silicon dioxide and applicable as "Cabinet order table 9, shall be indicated the Name of the substances (article 18 -2) #634.

### 16. Other information

#### Reference literature

15,911 Kagaku Shouhin, The Chemical Diary Co., Ltd. (2011)  
Material Safety Data Sheet No.P002, Dojindo Laboratories (2004.1.15)  
Material Safety Data Sheet No.JW190062, Wako Pure Chemical Industries, Ltd. (2007.03.01)  
Material Safety Data Sheet No.051110033, TOSOH CORPORATION (2004.07.09)  
Koukuu Kikenbutsu Yusou Houreisyu, Ed. MLIT, HOUBUN SHORIN CO., LTD.(2015)  
JIS Z 7252:2014 Classification of chemicals based on "Globally Harmonized System of Classification and Labelling of Chemicals (GHS)" (Japanese Industrial Standards Committee)  
JIS Z 7253:2012 Hazard communication of chemicals based on GHS-Labeling and Safety Data Sheet (SDS) (Japanese Industrial Standards Committee)  
UN GHS (tentative translation, forth revised version), GHS Kankei Syocho Renraku Kaigi (2011)  
Ministry of Economy, Trade and Industry, GHS Classification Guidance for Enterprises 2013 Revised Edition (2013)

NOTE) This information is not always exhaustive and use with care.  
This data sheet only provides information but any description cannot be warranted.  
Descriptions may possibly be changed because of new findings or modification of the current knowledge.  
Precautions only cover normal handling.  
This English SDS is prepared in the cooperation with the Chemicals Evaluation and Research Institute (CERI), Japan.