

Safety Data Sheet

Reference No. 1029

Issue: 12th October 1995
Revision: 1st September 2015

1. Chemical product and company identification

| | | | |
|--------------|--|-------|-------|
| Product name | WATER it Test Kit Total Hardness | Model | WA-TH |
| 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:

| | |
|---|----------------------|
| Acute toxicity (inhalation): | Category 4 |
| 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]

Harmful if inhaled.
Causes eye irritation.
May cause damage to 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 reagent.
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 | Phthalein complexone | Extender | Buffering agent | Polyethylene |
| Content | <0.01% | < 5% | <4.99% | >90% |
| Chemical formula | C ₃₂ H ₃₂ N ₂ O ₁₂ | — | — | (C ₂ H ₄) _n |
| METI No. (reference number under CSCL in Japan) | — | — | — | (6)-1 |
| CAS No. | 2411-89-4 | — | — | 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 reagent or waste solution.
 In case of indoor use: if spilled on a table or floor, wipe off immediately spilled reagent 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): Not established
 OSHA (PEL): Not established

Protective equipment: Recommended to wear protective glasses and gloves

9. Physical and chemical properties

Physical state: Tube containing powder reagent
1.1 g x 50 tubes/kit, aluminum laminated packaging each of 5 tubes
Color: White (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.

Phthalein complexone:

No data regarding health hazard is available.

Polyethylene:

Acute toxicity:

Oral: Rat LD₅₀ > 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 LD₅₀ values (rat) of each ingredient.

[Acute toxicity (inhalation)]

Classified as Category 4 (Warning, harmful if inhaled.) based on application of the additive equation of LC₅₀ values (rat-inhalation) of each ingredient.

[Serious eye damage/ eye irritation]

Buffering agent contains more than 3% of category 2; Classified as Category 2 (Warning, Causes serious eye irritation.).

[Specific target organ toxicity (single exposure)]

Buffering agent contains 1 to 10 % of STOT category 1 (stomach) substance; Classified as category 2 (Warning, May cause damage to stomach.).

[Skin corrosion/ irritation], [Respiratory or skin sensitization], [Germ cell mutagenicity], [Carcinogenicity], [Reproductive toxicity], [Specific target organ toxicity (repeated exposure)], [Aspiration hazard]

Classifications are not possible because of lack of data.

12. Ecological information

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

Phthalein complexone, 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 pH of 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.140 g/kit

15. Regulatory information

PRTR Act: Not applicable
Industrial Safety and Health Act: Not applicable

16. Other information

Reference literature

15,911 Kagaku Shouhin, The Chemical Diary Co., Ltd. (2011)
Material Safety Data Sheet No.P004, Dojindo Laboratories (2002.10.23)
Material Safety Data Sheet No.051110033, TOSOH CORPORATION (2004.07.09)
Koukoku Kikenbutsu Yusou Houeisyu, 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.