Safety Data Sheet

Reference No. 1030

Issue: 12th October 1995
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1. Chemical product and company identification

Product name WATER it Test Kit Magnesium Model WA-Mg

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:
Skin corrosion/irritation: Category 1
Serious eye damage/eye irritation: Category 1
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**]**
Danger

[Hazard statements**]**
Causes severe skin burns and eye damage.
Causes serious eye damage.

[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	Titan Yellow	Buffering agent	Extender	Polyethylene
Content	<0.01%	<0.99%	<10%	>89%
Chemical formula	$C_{28}H_{19}N_5Na_2O_6S_4$	—	—	$(C_2H_4)_n$
METI No. (reference number under CSCL in Japan)	(5)-4156	—	—	(6)-1
CAS No.	1829-00-1	—	—	9002-88-4

4. First-aid measures

If reagents or test solutions;

Enter in eyes: Immediately rinse with water for more than 15 minutes followed by the treatment from an ophthalmologist.
Contact with skin: Immediately wash out contaminated site with plenty of water.
Enter into mouth: Immediately rinse mouth with plenty of water.

If any symptoms appear after above measures, immediately get medical advice or treatment.
Especially in case ingested reagent or test solution, drink plenty of milk or water and 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 (water spray), powder, carbon dioxide, and 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. Do not contact with eyes and skin.
Concentrated waste solution should not be released into sewer or rivers.

7. Handling and storage

Handling: Do not inhale or ingest the reagent. Avoid contacting the reagent with eyes and skin.
Since the pH level of test solution will be alkaline of 13 or higher, avoid contact with eyes and skin, and do not ingest the solution.
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, cool, dry, and dark 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: Faint yellow (powder), semi-transparent (polyethylene tube)
Odor: No odor
pH: 13

Melting point, boiling point, flash point, ignition point, lower explosion limit, vapor pressure, density, specific gravity, solubility, Log Pow, kinematic 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.

Titan Yellow:
Acute toxicity: Oral-rat LD_{50} > 500 mg/kg (RTECS)
Other data: Not available

Polyethylene:
Acute toxicity: Oral-rat LD_{50} > 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_{50} values (rat) of each ingredient.
[Skin corrosion/ irritation]
pH of mixture $\geq$ 11.5; Category 1 (Danger, Causes severe skin burns and eye damage.)
[Serious eye damage/ eye irritation]
pH of mixture $\geq$ 11.5: Category 1 (Danger, Causes serious eye damage.)

[Specific target organ toxicity (single exposure)], [Specific target organ toxicity (repeated exposure)]
Not classified based on data of each ingredient.

[Acute toxicity (dermal)], [Respiratory or skin sensitization], [Germ cell mutagenicity], [Carcinogenicity], [Reproductive toxicity], [Aspiration hazard]
Classifications are not possible because of data lack.

12. Ecological information

No data on mixture is available. Data on each substance are shown.
Titan Yellow, 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 data lack.
[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

The pH level of waste solution will be alkaline of 13 or higher. 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
Waste Disposal and Cleaning Act: Applicable
Since the pH of waste solution after measurement is more than 12.5, applicable as a “Special Controlled Industrial Waste” under the Act.

16. Other information

Reference literature

15,911 no Kagaku Shouhin, The Chemical Diary Co., Ltd. (2011)
Material Safety Data Sheet No.JW201218, Wako Pure Chemical Industries, Ltd. (2009.05.21)
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-Labelling 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.