Safety Data Sheet

Reference No. 1015

Issue: 13th March 1998
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1. Chemical product and company identification

Product name WATER it Test Kit Free Cyanide Model WA-CN

Company name OPTEX CO.,LTD.
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Tel +81-77-579-8100
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Section Quality Control Dept.

Recommended uses and restrictions Reagent for water quality measurement

2. Hazards identification

Most important hazards information: Irritation
Its effects: Harmful if inhaled or ingested. Contact with eyes, skin and mucous causes irritation.
Long-term exposure may cause discomfort feeling, nausea or headache.

[GHS Classification**]**
Physical hazards: Classification not possible (no data for GHS classification available)
Health hazards: 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**]**
None

[Signal word**]**
None

[Hazard statements**]**
None

[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		K-2 reagent		
Chemical name	Chloramine T (p-Toluenesulfon-chloramide sodium salt)	Buffering agent	Sodium Isonicotinate(Sodium 4-Pyridine-carboxylate)	Other ingredient	Polyethylene
Content	< 5%	＞95%	< 1%	<10%	>89%
Chemical formula	$CH_3C_6H_4SO_2NClNa \cdot 3H_2O$	－	$C_6H_4NO_2 \cdot Na$	－	$(C_2H_4)_n$
METI No. (reference number under CSCL in Japan)	(3)-2178	－	－	－	(6)-1
CAS No.	127-65-1	－	16887-79-9	－	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, reagents, waste solutions after the measurement and contaminated containers should be brought back.
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 will not contact with eyes or skin, and avoid ingestion.
Especially for outdoor use, ensure to bring back reagents, waste solutions after the measurement, and the 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: K-1: Powder reagent 0.05 g x 40 tubes/kit poly-tube in a poly bag
K-2: Tube containing powder reagent
1.1g x 40 tubes/kit (5 tubes per aluminum laminated packaging)
Color: K-1: White (powder), K-2: white (powder), semi-transparent (polyethylene tube)
Odor: No odor
pH: 7 (when added K-1), 6 (final measurement solution)

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 of K-1 and K-2 reagents are shown.

K-1 reagent
Chloramine T:
Acute toxicity: Intravenous: Rabbit-LDLo: 25 mg/kg (RTECS)
Subcutaneous: Guinea pig-LDLo: 900 mg/kg (RTECS) : Category 4
Other data: Not available

K-2 reagent
Sodium Isonicotinate: No toxicological information is available. Show below data as Isonicotinic acid.
Isonicotinic acid:
Acute toxicity: Oral: Rat-LD_{50}: 5,000 mg/kg: Category 5
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)]
K-1 reagent: Not classified based on application of the additive equation of LD_{50} (rats) values of each ingredient.
K-2 reagent: Not classified based on application of the additive equation of LD_{50} (rats) values of each ingredient.

K-1, K-2 reagent:[Skin corrosion/ irritation], [Serious eye damage/ eye irritation], [Respiratory or skin sensitization], [Germ cell mutagenicity], [Carcinogenicity], [Reproductive toxicity], [Specific target organ toxicity (single exposure)], [Specific target organ toxicity (repeated exposure)], [Aspiration hazard]
Classification is not possible due to not enough data available.

12. Ecological information

No data on mixture is available. Data on each of K-1 and K-2 reagents are shown.

K-1 reagent
Chloramine T: No eco-toxicological information available.

K-2 reagent
Sodium Isonicotinate: No eco-toxicological information is available. Show below data as Isonicotinic acid.
Isonicotinic acid: No eco-toxicological information available.
Polyethylene: No eco-toxicological information available.

GHS classifications of K-1 and K-2 reagents as an each of mixture are shown below.
[Hazardous to the aquatic environment acute], [Hazardous to the aquatic environment chronic]
Classification is not possible due to not enough data available.
[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

If high concentration of Free Cyanide is detected, pay special attention to the gas that may be generated after the neutralization.
Always dispose of in accordance with local regulations.

14. Transport information

In addition to precautionary measures regarding the handling and the storage, avoid rough handling that may cause damaging the containers. It is recommended to ship by air because of the storage under high temperature for long period of time 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

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Material Safety Data Sheet No. JW030218, Wako Pure Chemical Industries, Ltd. (2007.09.19)
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Material Safety Data Sheet No. JW090210, Wako Pure Chemical Industries, Ltd. (2007.09.10)
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.