Issue date: 12/5/2003
Revision date: 4/2/2024

# Safety Data Sheet

## 1. Chemical product and company identification

| | | |
|---|---|---|
| Product name | : | Sodium tungstate(VI) dihydrate |

### Company information

| | | |
|---|---|---|
| Name of manufacturer | : | KANTO CHEMICAL CO., INC. |
| Address | : | 2-1, Nihonbashi, Muromachi 2-Chome, Chuo-Ku, Tokyo, 103-0022, JP |
| Name of section | : | Business Administration Department, Reagent Division |
| Telephone number | : | +81-3-6214-1090 |
| Facsimile number | : | +81-3-3241-1047 |
| Mail address | : | BC32@kanto.co.jp |
| Reference No | : | 37300 |
| Recommended use | : | For research use only |
| Restrictions on use | : | Seek expert judgment when using the product for applications other than those recommended. |

## 2. Hazards identification

### GHS classification

| | | |
|---|---|---|
| Health hazards | Acute toxicity (oral) | Category 4 |
| | Serious eye damage/eye irritation | Category 2B |

Hazard pictograms



| | | |
|---|---|---|
| Signal word | : | Warning |
| Hazard statements | : | Harmful if swallowed<br>Causes eye irritation |

### Precautionary statements

| | | |
|---|---|---|
| Prevention | : | Wash hands, forearms and face thoroughly after handling.<br>Do not eat, drink or smoke when using this product. |
| Response | : | IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.<br>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>Rinse mouth.<br>If eye irritation persists: Get medical advice/attention. |
| Disposal | : | Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. |

## 3. Composition/information on ingredients

| | | |
|---|---|---|
| Distinction of substance or mixture | : | Substance |

| Chemical name | Concentration (%) | Formula | TSCA | EC-No. | CAS RN |
|---|---|---|---|---|---|
| Sodium tungstate(VI) dihydrate | ≥ 98 | Na2WO4・2H2O | Listed | 236-743-4 | 10213-10-2 |

## 4. First aid measures

### First aid measures

First-aid measures after inhalation : Remove the victim to fresh air, and make him blow his nose and gargle.

First-aid measures after skin contact : Wash the affected areas under running water.

First-aid measures after eye contact : Wash the affected areas under running water.

First-aid measures after ingestion : Give the victim water or salt water and make him vomit. Get medical attention.

Personal Protection in First Aid and Measures : Rescuers should wear proper protective equipment like rubber gloves, goggles.

## 5. Fire fighting measures

Suitable extinguishing media : This product is noncombustible.

Unsuitable extinguishing media : None

Firefighting instructions : Move containers from fire area if it can be done without risk, if not possible, apply water from a safe distance to cool and protect surrounding area.

Personal protection (Emergency response) : Firefighters should wear protective equipment.

## 6. Accidental release measures

### Personal Precautions, Protective Equipment and Emergency Procedures

General measures : Wear proper protective equipment and avoid contact with skin and inhalation of dust. Conduct operations from upwind and evacuate people downwind.

### Environmental precautions

Environmental precautions : Attention should be given to avoid discharge of spilled product into rivers and resulting environmental damage. When diluting spill with large amounts of water, discharge of untreated wastewater into the environment must be avoided.

### Methods and Equipment for Containment and Cleaning up

For containment : Sweep up in a chemical waste container. Flush contaminated area with copious amounts of water.

## 7. Handling and storage

### Handling

Technical measures : Wear appropriate protective equipment to avoid contact with skin or inhalation of dust.

Precautions for safe handling : Avoid formation of dust and aerosols.

### Storage

| | | |
|---|---|---|
| Storage conditions | : | Store in a dark, cool place and tightly closed. |
| Material used in packaging/containers | : | Glass, polyethylene, polypropylene. |

## 8. Exposure controls / Personal protection equipment

| | |
|---|---|
| ACGIH TWA | 3 mg/m³ (R) (as W) |

| | | |
|---|---|---|
| Appropriate engineering controls | : | Install a local ventilation system in case of dusty condition. |

**Protective equipment**

| | | |
|---|---|---|
| Respiratory protection | : | If necessary, wear dust mask |
| Hand protection | : | Impervious protective gloves |
| Eye protection | : | Safety goggles |
| Skin and body protection | : | Protective clothing, protective boots |

## 9. Physical and chemical properties

| | | |
|---|---|---|
| Physical state | : | Solid |
| Color | : | Colorless - white |
| Odor | : | Odorless |
| pH | : | 8 - 10 (50g/L, 20℃) |
| Melting point | : | 665 ° C |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | 100 ° C (Becomes anhydrous salt) |
| Flammability | : | Not flammable. |
| Vapor pressure | : | No data available |
| Relative density | : | 3.2314 (19℃) |
| Density | : | No data available |
| Relative gas density | : | No data available |
| Solubility | : | Water: Soluble. Organic solvents: Insoluble in ethanol. |
| Partition coefficient n-octanol/water (log Pow) | : | No data available |
| Explosive limits (vol %) | : | No data available |
| Viscosity, kinematic | : | No data available |
| Particle characteristics | : | No data available |

## 10. Stability and reactivity

| | | |
|---|---|---|
| Reactivity | : | Has weak oxidizing properties. |
| Chemical stability | : | Stable under normal conditions. Effloresces. |
| Possibility of hazardous reactions | : | Stable under normal conditions of use. |
| Conditions to avoid | : | Light, heat. |
| Incompatible materials | : | Reducing substances, acids. |

| | | |
|---|---|---|
| Hazardous decomposition products | : | Tungsten oxides, sodium oxide. |

## 11. Toxicological information

| | | |
|---|---|---|
| Acute toxicity (oral) | : | Harmful if swallowed<br>rat LD50=1190mg/kg (as anhydrous salt) |
| Acute toxicity (dermal) | : | Classification not possible |
| Acute toxicity (inhalation) | : | No classification (gas)<br>No classification (vapor)<br>Classification not possible (dust, mist) |
| Skin corrosion/irritation | : | Classification not possible<br>Besides, it is reported that in a patch test in 853 workers, as a result of application of this substance anhydrous salt (5 to 20%), 2% subjects showed irritant pustular reactions. |
| Serious eye damage/irritation | : | Causes eye irritation<br>It is reported that in an eye irritation test using rabbits, as a result of application of 100 mg this substance anhydrous salt, slight conjunctival irritation was observed. From the above, it was classified into category 2B. |
| Respiratory sensitization | : | Classification not possible |
| Skin sensitization | : | Classification not possible<br>Besides, it is reported that in a patch test in 853 workers, as a result of application of this substance anhydrous salt (5 to 20%), sensitization was not observed, and that sensitization was found in 3 out of 20 animals in a maximization test using guinea pigs. |
| Germ cell mutagenicity | : | No classification<br>As for in vivo, both micronucleus tests using rat and mouse erythrocytes were negative, and a comet assay using mouse bone marrow cells was positive. As for in vitro, a bacterial reverse mutation test was negative. |
| Carcinogenicity | : | Classification not possible<br>No carcinogenicity information in humans. As for experimental animals, it is written that rats or mice were dosed with this substance anhydrous salt in drinking water at a 5 ppm concentration as tungsten for 540 days, an increased incidence of tumors was not observed. On the other hand, it is written that in a test in which female rats were intravenously injected 50 mg N-methyl-N-nitrosourea (NMU) after 14-day administration of a tungsten compound (not specified) containing 150 ppm tungsten, an increased incidence of breast cancer and shortened time up to occurrence of breast cancer were shown 125 days after NMU injection in tungsten administered groups. From the above test results, a conclusion cannot be drawn on the carcinogenicity of this substance, and there is no classification result by other organizations. Therefore, the substance was classified as "Classification not possible" for this hazard class due to lack of data. |
| Reproductive toxicity | : | Classification not possible<br>There is no information on human reproductive effects. As for experimental animals, although variations of sex hormone levels occurred in both males and females in a test to assess reproductive effects in rats in the administration of this substance anhydrous salt in an oral route, specific changes in sexual function and toxic effects on fertility were not shown. However, there is not enough test result using pregnant animals to assess developmental effects. Therefore, the substance was classified as "Classification not possible" for this hazard class due to lack of data. |

| | | |
|---|---|---|
| STOT-single exposure | : | Classification not possible<br>There are no human data on this substance. As for experimental animals, anorexia, incoordination, and dyspnea were described in oral administration in guinea pigs. However, the classification cannot be given due to unknown details on doses and so on. From the above, the classification is not possible due to lack of data. |
| STOT-repeated exposure | : | Classification not possible |
| Aspiration hazard | : | Classification not possible |

## 12. Ecological information

### Ecotoxicity

| | | |
|---|---|---|
| Aquatic acute | : | Classification not possible |
| Aquatic chronic | : | Classification not possible |

### Persistence and degradability

No additional information available

### Bioaccumulative potential

No additional information available

### Mobility in soil

No additional information available

### Hazardous to the ozone layer

| | | |
|---|---|---|
| Ozone | : | Classification not possible |

## 13. Disposal considerations

| | | |
|---|---|---|
| Ecological waste information | : | Roasting method :<br>Recover metal tungsten by roast reduction method.<br>Or entrust approved waste disposal companies with the disposal.<br><br><Note><br>＊In case of disposal by roasting method, it is desirable to entrust to disposal companies. |
| Contaminated container and packaging | : | In case of disposal of empty bottles, dispose bottles after removing the content thoroughly. |

## 14. Transport information

### International Regulations

### Transport by sea(IMDG)

| | | |
|---|---|---|
| UN-No. (IMDG) | : | Not applicable |
| Proper Shipping Name (IMDG) | : | Not applicable |
| Packing group (IMDG) | : | Not applicable |
| Transport hazard class(es) (IMDG) | : | Not applicable |

### Air transport(IATA)

| | | |
|---|---|---|
| UN-No. (IATA) | : | Not applicable |
| Proper Shipping Name (IATA) | : | Not applicable |
| Packing group (IATA) | : | Not applicable |
| Transport hazard class(es) (IATA) | : | Not applicable |

Marine pollutant : Not applicable

## 15. Regulatory information

Regulatory information with regard to this substance in your country or region should be examined by your own responsibility.

## 16. Other information

Data sources : Encyclopaedia Chimica, Kyoritsu Shuppan Co, Ltd. (1963) .
Handbook of 17322 Chemical Products, The Chemical Daily Co. (2022) .
NITE Chemical Risk Information Platform (NITE-CHRIP), National Institute of Technology and Evaluation.

The information contained herein is based on several references and the present state of our knowledge. However the SDS does not always cover all information about the product, handle the product carefully.The information is intended to ordinary usage, in case of particular handlings, conduct appropriate safety measurements.The information herein is only provision of information, and it does not represent a guarantee the properties of the product.The Safety Data Sheet(SDS) is prepared based on JIS Z7253.