# SAFETY DATA SHEET

Version: v1 Revision Date: 2024-02-07 Print Date: 2024-02-13

# SECTION 1:Identification of the substance/mixture and of the company/undertaking

### 1.1 Product identifiers

| Product name   | : Tungsten oxide |
|----------------|------------------|
| Product Number | : T119287        |
| Brand          | : aladdin        |
| CAS-No.        | : 12036-22-5     |

# 1.2 Relevant identified uses of the substance or mixture and uses advised against

: Laboratory chemicals, Manufacture of substances.

Identified uses

# 1.3 Details of the supplier of the safety data sheet

| Company   | : Shanghai Aladdin Biochemical Tech Co.,Ltd |
|-----------|---|
| Address   | : 36 Xinjinqiao Road, Shanghai              |
| Telephone | : 400-620-6333                              |
| Fax       | : no data available                         |
|           |   |

#### 1.4 Emergency telephone number

| Emergency Phone | : 0532-83889090 |
|-----------------|-----------------|
|-----------------|-----------------|

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

# 2.2 GHS Label elements, including precautionary statements

Pictogram

|                            | $\mathbf{v}$   |
|----------------------------|--|
| Signal word                | Warning  |
| Hazard statement(s)        |  |
| H335                       | May cause respiratory irritation   |
| H413                       | May cause long lasting harmful effects to aquatic life                     |
| Precautionary statement(s) |  |
| P261                       | Avoid breathing dust/fume/gas/mist/vapors/spray.                           |
| P271                       | Use only outdoors or in a well-ventilated area.                            |
| P273                       | Avoid release to the environment.  |
| P304+P340                  | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P405                       | Store locked up.   |
| P403+P233                  | Store in a well-ventilated place. Keep container tightly closed.           |
|                            |  |



P501

Dispose of contents/container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

| Synonyms         | : Tungsten(IV) oxide;Tungsten dioxide |
|------------------|---------------------------------------|
| Formula          | : WO2                                 |
| Molecular weight | : 215.84                              |
| CAS No.          | : 12036-22-5                          |
| EC-NO.           | : 234-842-7                           |

#### Component

#### Classification

#### Tungsten oxide

no data available

≥100 mesh, 99.9% metals basis

Concentration

#### **SECTION 4: First aid measures**

## 4.1 Description of first aid measures

General advice no data available If inhaled If breathed in, move person into fresh air.If not breathing, give artificial respiration. In case of skin contact Wash off with soap and plenty of water. In case of eye contact Flush eyes with water as a precaution. If swallowed Never give anything by mouth to an unconscious person.Rinse mouth with water. Most important symptoms and effects both acute and delayed

# 4.2 Most important symptoms and effects, both acute and delayed

no data available

# 4.3 Indication of any immediate medical attention and special treatment needed

no data available

# **SECTION 5: Firefighting measures**

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#### 5.1 Extinguishing media

Suitable extinguishing media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Unsuitable extinguishing media no data available

# 5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products formed under fire conditions.- Tungsten oxide

#### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### 5.4 Further information

no data available

#### **SECTION 6: Accidental release measures**

# 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Sweep up and shovel.Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

no data available

#### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection.

#### 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.Keep in a dry place.

### 7.3 Specific end use(s)

no data available

#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

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### 8.2 Exposure controls

Appropriate engineering controls General industrial hygiene practice.

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves.Gloves must be inspected prior to use.Use proper glove removal technique (without touching gloves outer surface) to avoid skin contact with this product.Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.Wash and dry hands.

**Body Protection** 

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95(US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Control of environmental exposure

no data available

# **SECTION 9: Physical and chemical properties**

# 9.1 Information on basic physical and chemical properties

| a) Appearance                              | form: powder color: brown |
|--|---------------------------|
| b) Odour                                   | no data available         |
| c) Odour Threshold                         | no data available         |
| d) pH                                      | no data available         |
| e) Melting point/freezing point            | no data available         |
| f) Initial boiling point and boiling range | no data available         |
| g) Flash point                             | no data available         |
| h) Evaporation rate                        | no data available         |
| i) Flammability (solid, gas)               | no data available         |
| j) Upper/lower flammability or             |                           |
| explosive limits                           | no data available         |
| k) Vapour pressure                         | no data available         |
| I) Vapour density                          | no data available         |
| m) Relative density                        | no data available         |
| n) Water solubility                        | no data available         |
| o) Partition coefficient: n-octanol/water  | no data available         |
| p) Auto-ignition temperature               | no data available         |
| q) Decomposition temperature               | no data available         |



| r) Viscosity              | no data available |
|---------------------------|-------------------|
| s) Explosive properties N | no data available |
| t) Oxidizing properties N | no data available |

#### 9.2 Other safety information

no data available

## **SECTION 10: Stability and reactivity**

#### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

Stable under recommended storage conditions.

- 10.3 Possibility of hazardous reactions no data available
- 10.4 Conditions to avoid

no data available

10.5 Incompatible materials

Strong oxidizing agents

#### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.- Tungsten oxide

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

confirmed human carcinogen by IARC.

Acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitisation no data available Germ cell mutagenicity no data available Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or

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> Reproductive toxicity no data available Specific target organ toxicity - single exposure no data available Specific target organ toxicity - repeated exposure no data available Aspiration hazard May be harmful if inhaled.May cause respiratory tract irritation. Additional Information no data available

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

no data available

#### 12.2 Persistence and degradability

no data available

#### 12.3 Bioaccumulative potential

no data available

#### 12.4 Mobility in soil

no data available

#### 12.5 Results of PBT and vPvB assessment

no data available

#### 12.6 Other adverse effects

no data available

## SECTION 13:

#### 13.1 Disposal considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contaminated packaging Dispose of as unused product.

# **SECTION 14: Transport information**

DOT (US)

| UN number: no data available | Packing group: no data available | Class: no data available |
|------------------------------|----------------------------------|--------------------------|
|------------------------------|----------------------------------|--------------------------|

| Proper shipping name: no data<br>available | Reportable Quantity(RQ): no data available | Poison Inhalation Hazard: no data<br>available |
|--|--|--|
| Environmental Hazards: no data av          | ailable                                    |  |
| IMDG                                       |  |  |
| UN number: no data available               | Packing group: no data available           | EMS-No: no data available                      |
| Proper shipping name: no data ava          | ilable                                     |  |
| ΙΑΤΑ                                       |  |  |
| UN number: no data available               | Packing group: no data available           | Class: no data available                       |
| Proper shipping name: no data ava          | ilable                                     |  |
|  |  |  |

#### SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

### **SECTION 16: Other information**

Further information

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