

# MATERIAL SAFETY DATA SHEET SDS/MSDS

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

1.1 Product identifiers

Product name : **Tungsten** 1000 mg/litre AAS in HNO<sub>3</sub>

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

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : BIO-CHEM Chemical

5455, Nicholson Road Science Market, Ambala Cantt.

133001 Haryana (India) +91-82952 41953

info@biofinechemical.com - www.biofinechemical.com

1.4 Emergency telephone number

Emergency Phone # +91 9992151495 (10:00am - 6:30 pm) [Office hours]

**SECTION 2: Hazards identification** 

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Corrosive to metals (Category 1), H290 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Dermal (Category 3), H311 Skin corrosion (Category 1B), H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

T Toxic R23/24/25 C Corrosive R34

For the full text of the R-phrases mentioned in this Section, see Section 16.

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger Acute toxicity Companys to most

Hazard statement(s)

H290 May be corrosive to metals.

H301 + H311 Toxic if swallowed or in contact with skin

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

Wear protective gloves/ protective clothing/ eye protection/ face P280

protection.

P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/

physician. Rinse mouth.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. P303 + P361 + P353

Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for

breathing. Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove P305 + P351 + P338

contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard

Statements

none

## According to European Directive 67/548/EEC as amended.

Hazard symbol(s) Toxic Т

R-phrase(s)

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

R34 Causes burns.

S-phrase(s)

In case of contact with eyes, rinse immediately with plenty of water and S26

seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection. S36/37/39

**S45** In case of accident or if you feel unwell, seek medical advice immediately

(show the label where possible).

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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

#### 3.2 **Mixtures**

Component

## Hazardous ingredients according to Regulation (EC) No 1272/2008

| Nitric acid |              |                            |               |
|-------------|--------------|----------------------------|---------------|
| CAS-No.     | 7697-37-2    | Ox. Liq. 3; Skin Corr. 1A; | >= 5 - < 10 % |
| EC-No.      | 231-714-2    | H272, H314                 |               |
| Index-No.   | 007-004-00-1 |                            |               |
|             |              |                            |               |

Classification

## Hydrofluoric acid

Index-No.

| CAS-No. | 7664-39-3 | Acute Tox. 2; Acute Tox. 1;  | >= 1 - < 5 % |
|---------|-----------|------------------------------|--------------|
| EC-No.  | 231-634-8 | Skin Corr. 1A; H300 + H310 + |              |

009-003-00-1 H330. H314 Index-No.

007-004-00-1

#### Hazardous ingredients according to Directive 1999/45/EC

| Component        | •                      | Classification  | Concentration |
|------------------|------------------------|-----------------|---------------|
| Nitric acid      |                        | 0.0.0.0.0.      |               |
| CAS-No.<br>FC-No | 7697-37-2<br>231-714-2 | O, C, R 8 - R35 | >= 5 - < 10 % |

Concentration

#### Hydrofluoric acid

CAS-No. 7664-39-3 T+, C, R26/27/28 - R35 >= 1 - < 5 %

EC-No. 231-634-8 Index-No. 009-003-00-1

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

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

## 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

## Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Nitrogen oxides (NOx), Hydrogen fluoride

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

## 5.4 Further information

No data available

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

## 6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

For personal protection see section 8.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

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

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

#### 8.1 Control parameters

Components with workplace control parameters

#### 8.2 Exposure controls

#### Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

## Personal protective equipment

## Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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 glove's 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**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

## 9.1 Information on basic physical and chemical properties

a) Appearance Form: clear, liquid Colour: colourlessb) Odour No data available

c) Odour Threshold No data availabled) 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-<br>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                         | No data available |
| t) | Oxidizing properties                         | 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

No data available

## 10.6 Hazardous decomposition products

Other decomposition products - No data available In the event of fire: see section 5

## **SECTION 11: Toxicological information**

## 11.1 Information on toxicological effects

## **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

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (Hydrofluoric acid)

## 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**

No data available

## **Additional Information**

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Liver - Irregularities - Based on Human Evidence (Nitric acid)

## **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

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

No data available

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

## **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

#### Contaminated packaging

Dispose of as unused product.

## **SECTION 14: Transport information**

#### 14.1 UN number

ADR/RID: 3264 IMDG: 3264 IATA: 3264

#### 14.2 UN proper shipping name

ADR/RID: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Hydrofluoric acid) IMDG: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Nitric acid, Hydrofluoric acid)

IATA: Corrosive liquid, acidic, inorganic, n.o.s. (Nitric acid, Hydrofluoric acid)

#### 14.3 Transport hazard class(es)

ADR/RID: 8 IMDG: 8 IATA: 8

14.4 Packaging group

ADR/RID: II IMDG: II IATA: II

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

## 14.6 Special precautions for user

No data available

## **SECTION 15: Regulatory information**

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

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

## 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

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

## Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Acute toxicity

H272 May intensify fire; oxidiser. H290 May be corrosive to metals.

H300 + H310 + Fatal if swallowed, in contact with skin or if inhaled

H330

H301 Toxic if swallowed.
H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

Ox. Liq. Oxidizing liquids Skin Corr. Skin corrosion

## Full text of R-phrases referred to under sections 2 and 3

C Corrosive

R 8 Contact with combustible material may cause fire.

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

Very toxic by inhalation, in contact with skin and if swallowed.

O Oxidising
T+ Very toxic
R34 Causes burns.

R35 Causes severe burns.