



Preparing for the New Era of Laboratories

MATERIAL SAFETY DATA SHEET
(MSDS)

According to regulation (EU) no.1907/2006

ARSENIC TRIOXIDE 99 % AR	
PRODUCT CODE	: O-5037
CAS No	: 1327-53-3
FORMULA	: As_2O_3
UN No	: 1561

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 99% AR



MSDS Number : 0056

Date : Aug 19th, 2024

Version : 1.0

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

- 1.1 Product Name** : ARSENIC TRIOXIDE 99% AR
Synonyms : Arsenic(III) oxide
CAS No. : 1327-53-3
HS Code : 2811 29 90
Chemical Formula : As₂O₃
Molecular Weight : 197.84 g/mol
Product Code : 0-5037
Brand : Labotiq
- 1.2 Manufacturer** : Labotiq
Address : Jl.Terapi Raya AD2-Bumi Menteng Asri Bogor, Jawa Barat Indonesia – 16111
Website : www.labotiq.net
Email : labotiq.id@gmail.com
For information : Phone : (+62-251) 8391110, 8311662, Fax : (+62-251) 83135710
Emergency number : +6281316894650
- 1.3 Application** : Laboratory chemicals, Manufacture of substances, General Chemical reagent

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, Oral (Category 2), H300
 Skin corrosion (Category 1B), H314
 Carcinogenicity (Category 1A), H350
 Acute aquatic toxicity (Category 1), H400
 Chronic aquatic toxicity (Category 1), H410

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

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

H300
 H314
 H350
 H410

Danger

Fatal if swallowed.
 Causes severe skin burns and eye damage.
 May cause cancer.
 Very toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260
 P280

Do not breathe dusts or mists.

Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.

P303 + P361 + P353

P304 + P340 + P310

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor.

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P305 + P351 + P338

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Supplemental Hazard Statements

none

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

3.1 Substances

Synonyms	: Arsenic(III) oxide
Formula	: As ₂ O ₃
Molecular weight	: 197.84 g/mol
CAS-No.	: 1327-53-3
EC-No.	: 215-481-4
Index-No.	: 033-003-00-0

3.2 Mixture

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

Component	Classification	Concentration
Arsenic trioxide CAS-No. 1327-53-3 EC-No. 215-481-4 Index-No. 033-003-00-0	Acute Tox. 2; Skin Corr. 1B; Carc. 1A; Aquatic Acute 1; Aquatic Chronic 1; H300, H314, H350, H400, H410 M- Factor - Aquatic Acute: 10	<=100 %

For the full text of the H-Statements 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.

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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

Nature of decomposition products not known. Not combustible. Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

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 dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.

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7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Storage class

Storage class (TRGS 510): 6.1A: Combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials

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

8.2 Exposure control

Appropriat 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

Face shield and safety glasses 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740, Size M)

Splash contact

Material: Nitrile rubber
Minimum layer thickness: 0.11 mm
Break through time: 480 min
Material tested: Dermatril® (KCL 740, Size M)

Body Protection

protective clothing

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (EN 143) respirator cartridges as a backup to engineering controls. If th full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

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Control of environmental exposure

Do not let product enter drains

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	Form: powder
	Colour: white, light grey
Odour	odorless
Odour Threshold	Not applicable
pH	No data available
Melting point/freezingpoint	Melting point/range: 313 °C
Initial boiling point and boiling range	460 °C at 1.013 hPa
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	The product is not flammable. - Regulation (EC) No. 440/2008, Annex, A.10
Upper/lower flammability or explosive limits	No data available
Vapour pressure	0.000001 mmHg at 66 °C
Vapour density	No data available
Relative density	3.738 g/cm ³
Water solubility	17.8 g/l at 20 °C - OECD Test Guideline 105
Partition coefficient: noctanol/water	log Pow: 5
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
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

Risk of explosion with:

Aluminum, magnesium, Zinc

Violent reactions possible with: halogens, Hydrogen halides, strong reducing agents, Bromine, Fluorine, halogen-halogen compounds, Hydrogen fluoride, nitrates, chlorates, Mercury

10.4 Conditions to avoid

Heat. no information available

10.5 Incompatible materials

Oxidizing agents, Metals, Strong oxidizing agents

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10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Arsenic oxides

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

LD50 Oral - Rat - 14.6 mg/kg(Arsenic trioxide)

Skin corrosion/irritation

No data available(Arsenic trioxide)

Serious eye damage/eye irritation

No data available(Arsenic trioxide)

Respiratory or skin sensitisation

Maximization Test - Guinea pig

Result: negative (OECD Test Guideline 406)

Remarks: (in analogy to similar products)

Germ cell mutagenicity

Test Type: Ames test

Test system: Escherichia coli Result: negative

Remarks: The value is given in analogy to the following substances: sodium arsenite

Carcinogenicity

No data available

Reproductive toxicity

No data available(Arsenic trioxide)

Specific target organ toxicity - single exposure

No data available(Arsenic trioxide)

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available(Arsenic trioxide)

Additional Information

RTECS: CG3325000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated., Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache(Arsenic trioxide)

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish

flow-through test - Pimephales promelas (fathead minnow) - 12,6 mg/l - 96 h (US-EPA)

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Remarks: The value is given in analogy to the following substances: sodium arsenite

Toxicity to bacteria

Remarks: (ECHA) (Arsenic trioxide)

12.2 Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Bioaccumulation

Lepomis cyanellus(Arsenic trioxide)

Bioconcentration factor (BCF): 236

12.4 Mobility in soil

No data available(Arsenic trioxide)

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. Dissolve or mix the material with a combustible solvent and burn in a chem scrubber.

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

14.1 UN number

ADR/RID: 1561

IMDG: 1561

IATA: 1561

14.2 UN proper shipping name

ADR/RID: ARSENIC TRIOXIDE

IMDG: ARSENIC TRIOXIDE

IATA: ARSENIC TRIOXIDE

14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG : 6.1

IATA: 6.1

14.4 Packaging group

ADR/RID: II

IMDG: II

IATA: II

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes

IATA: no

14.6 Special precautions for user

No data available

SECTION 15: Regulatory information

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

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

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.

H300	Fatal if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H350	May cause cancer.
H410	Very toxic to aquatic life with long lasting effects.

National Fire Protection Association (U.S.A.):

Health: 4

Flammability: 0

Reactivity: 0

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Labotiq shall not be held liable for any damage resulting from handling or from contact with the above product.

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