

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

Product Code: 00305

Molecular Formula: As_2O_3

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

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

1.1. Product identifier

Product form	:	Substance
Trade name	:	Arsenic Trioxide 98% Extra Pure
EC no	:	215-481-4
CAS No	:	1327-53-3
Synonyms	:	Arsenous acid / Arsenic(III) oxide

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Laboratory chemicals, Manufacture of substances

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Company : Chemnovo Synthesis Pvt Ltd.
N-226 Near Kumbhavali Naka
Tarapur MIDC, Boisar-401 506
Palghar, Maharashtra
Telephone : +91 7400096089
Email: export@chemnovo.in

1.4. Emergency telephone number

Emergency number : + 91 7400096089 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), H300

Category 1

Skin corrosion/irritation, H314

Category 1B

Carcinogenicity, Category H350

1A

Hazardous to the aquatic H410

environment – Chronic

Hazard, Category 1

Full text of classification categories and H statements : see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Carc.Cat.1; R45

T+; R28

C; R34

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

N; R50/53

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS05

GHS06

GHS08

GHS09

Signal word (CLP)	:	Danger
Hazard statements (CLP)	:	H300 - Fatal if swallowed H314 - Causes severe skin burns and eye damage H350 - May cause cancer H410 - Very toxic to aquatic life with long lasting effects
Precautionary statements (CLP)	:	P201 - Obtain special instructions before use P264 - Wash hands thoroughly after handling P273 - Avoid release to the environment P280 - Wear protective gloves, protective clothing, eye protection, face protection P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing P310 - Immediately call a doctor

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	:	Arsenic Trioxide 98% Extra Pure
CAS No	:	1327-53-3
EC no	:	215-481-4

Full text of R- and H-statements: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

4.1. Description of first aid measures

First-aid measures after inhalation	:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after skin contact	:	Get medical advice/attention. Wash with plenty of soap and water.
First-aid measures after eye contact	:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
First-aid measures after ingestion	:	Rinse mouth. Immediately call a POISON CENTER or doctor/physician. Do NOT induce vomiting.

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

Symptoms/injuries	:	Causes severe skin burns and eye damage.
Symptoms/injuries after inhalation	:	May cause cancer by inhalation.
Symptoms/injuries after ingestion	:	Fatal if swallowed.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	Carbon dioxide. Dry powder. Foam. Water spray.
Unsuitable extinguishing media	:	Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighter

Protection during firefighting	:	Do not enter fire area without proper protective equipment, including respiratory protection.
--------------------------------	---	---

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	:	Evacuate unnecessary personnel.
----------------------	---	---------------------------------

6.1.2. For emergency responders

Protective equipment	:	Use personal protective equipment as required.
Emergency procedures	:	Ventilate area.

6.2. Environmental precautions

Very toxic to aquatic life with long lasting effects.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up	:	Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. On land, sweep or shovel into suitable containers.
-------------------------	---	--

6.4. Reference to other sections

No additional information available

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Do not breathe vapours. Obtain special instructions before use. Avoid contact with skin and eyes.
Hygiene measures	:	Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	:	Store in a well-ventilated place. Keep container tightly closed.
--------------------	---	--

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Hand protection	:	Protective gloves
Eye protection	:	Chemical goggles or face shield
Skin and body protection	:	Wear suitable protective clothing
Respiratory protection	:	Wear respiratory protection

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Molecular mass	:	197.84 g/mol
Colour	:	White powder.
Odour	:	odourless.
Odour threshold	:	No data available
pH	:	No data available
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	312.3 °C
Freezing point	:	No data available
Boiling point	:	457.2 °C
Flash point	:	No data available
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	No data available
Density	:	3.74 g/cm ³
Solubility	:	Water: 3.7 g/100ml @ 20°C

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	No data available
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Thermal decomposition generates : Corrosive vapours.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Air contact. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Thermal decomposition generates : Corrosive vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	Oral: Fatal if swallowed.
Skin corrosion/irritation	:	Causes severe skin burns and eye damage.
Serious eye damage/irritation	:	Serious eye damage, category 1, implicit
Respiratory or skin sensitisation	:	Not classified
Germ cell mutagenicity	:	Not classified
Carcinogenicity	:	May cause cancer.
Reproductive toxicity	:	Not classified
Specific target organ toxicity (single exposure)	:	Not classified
Specific target organ toxicity (repeated exposure)	:	Not classified
Aspiration hazard	:	Not classified
Potential adverse human health effects and symptoms	:	Fatal if swallowed.

SECTION 12: Ecological information

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**ARSENIC TRIOXIDE 98% EXTRA PURE****CAS-No.: 1327-53-3****12.1. Toxicity**

Ecology – water : Very toxic to aquatic life with long lasting effects

12.2. Persistence and degradability

ARSENIC TRIOXIDE 98% EXTRA PURE (1327-53-3)	
Persistence and degradability	May cause long-term adverse effects in the environment

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

ARSENIC TRIOXIDE 98% EXTRA PURE (1327-53-3)	
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII	
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII	

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

Product/Packaging disposal : Dispose of contents/container to ...
recommendations

Ecology – waste materials : Hazardous waste due to toxicity.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / AND

14.1. UN number

UN-No. (ADR) : 1561

UN-No. (IMDG) : 1561

UN-No.(IATA) : 1561

UN-No.(AND) : 1561

UN-No. (RID) : 1561

14.2. UN proper shipping name

Proper Shipping Name (ADR) : ARSENIC TRIOXIDE

Proper Shipping Name (IMDG) : ARSENIC TRIOXIDE

Proper Shipping Name (IATA) : ARSENIC TRIOXIDE

Proper Shipping Name (ADN) : ARSENIC TRIOXIDE

Proper Shipping Name (RID) : ARSENIC TRIOXIDE

Transport document description (ADR) : UN 1561 ARSENIC TRIOXIDE, 6.1, II, (D/E), ENVIRONMENTALLY HAZARDOUS

Transport document description (IMDG) : UN 1561 ARSENIC TRIOXIDE, 6.1, II, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS

MATERIAL SAFETY DATA SHEET (SDS/MSDS)

ARSENIC TRIOXIDE 98% EXTRA PURE

CAS-No.: 1327-53-3

Transport document description (IATA) :	UN 1561 ARSENIC TRIOXIDE, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (ADN) :	UN 1561 ARSENIC TRIOXIDE, 6.1, II, ENVIRONMENTALLY HAZARDOUS
Transport document description (RID) :	UN 1561 ARSENIC TRIOXIDE, 6.1, II, ENVIRONMENTALLY HAZARDOUS

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) :	6.1
Danger labels (ADR) :	6.1
:	:



IMDG

Transport hazard class(es) (IMDG) :	6.1
Danger labels (IMDG) :	6.1
:	:



IATA

Transport hazard class(es) (IATA) :	6.1
Hazard labels (IATA) :	6.1
:	:



AND

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**ARSENIC TRIOXIDE 98% EXTRA PURE****CAS-No.: 1327-53-3**

Transport hazard class(es) (ADN) : 6.1
Danger labels (ADN) : 6.1



RID
Transport hazard class(es) (RID) : 6.1
Danger labels (RID) : 6.1

**14.4. Packing group**

Packing group (ADR) : II
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : II
Packing group (RID) : II

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available

14.6. Special precautions for user

- Overland transport

Classification code (ADR) : T5
Limited quantities (ADR) : 500g
Excepted quantities (ADR) : E4
Packing instructions (ADR) : P002, IBC08
Special packing provisions (ADR) : B4
Mixed packing provisions (ADR) : Mp10
Portable tank and bulk container : T3
instructions (ADR)
Portable tank and bulk container special

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**ARSENIC TRIOXIDE 98% EXTRA PURE****CAS-No.: 1327-53-3**

provisions (ADR)	:	Tp33
Tank code (ADR)	:	SGAH
Tank special provisions (ADR)	:	TU15, Te19
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	2
Special provisions for carriage – Packages (ADR)	:	V11
Special provisions for carriage – Loading, unloading and handling (ADR)	:	CV13, Cv28
Special provisions for carriage – Operation (ADR)	:	S9, S19
Hazard identification number (Kemler No.)	:	60
Orange plates	:	

60**1561**

Tunnel restriction code (ADR)	:	D/E
EAC code	:	2X
– Transport by sea		
Limited quantities (IMDG)	:	500g
Excepted quantities (IMDG)	:	E4
Packing instructions (IMDG)	:	P002
IBC packing instructions (IMDG)	:	IBC08
IBC special provisions (IMDG)	:	B2, B4
Tank instructions (IMDG)	:	T3
Tank special provisions (IMDG)	:	Tp33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-A
Stowage category (IMDG)	:	A
MFAG-No	:	151
– Air transport		
PCA Excepted quantities (IATA)	:	E4
PCA Limited quantities (IATA)	:	Y644
PCA limited quantity max net quantity (IATA)	:	1kg
PCA packing instructions (IATA)	:	669
PCA max net quantity (IATA)	:	25kg
CAO packing instructions (IATA)	:	676
CAO max net quantity (IATA)	:	100kg
ERG code (IATA)	:	6L
– Inland waterway transport		

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**ARSENIC TRIOXIDE 98% EXTRA PURE****CAS-No.: 1327-53-3**

Classification code (ADN)	:	T5
Special provisions (ADN)	:	802
Limited quantities (ADN)	:	500g
Excepted quantities (ADN)	:	E4
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	2
- Rail transport		
Classification code (RID)	:	T5
Limited quantities (RID)	:	500g
Excepted quantities (RID)	:	E4
Packing instructions (RID)	:	P002, IBC08
Special packing provisions (RID)	:	B4
Mixed packing provisions (RID)	:	Mp10
Portable tank and bulk container instructions (RID)	:	T3
Portable tank and bulk container special provisions (RID)		
	:	Tp33
Tank codes for RID tanks (RID)	:	SGAH
Special provisions for RID tanks (RID)	:	Tu15
Transport category (RID)	:	2
Special provisions for carriage	:	W11
- Packages (RID)		
Special provisions for carriage	:	CW13, CW28, Cw31
- Loading and unloading (RID)		
Colis express (express parcels) (RID)	:	Ce9
Hazard identification number (RID)	:	60

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU-Regulations**

No REACH Annex XVII restrictions

Diarsenic trioxide is on the REACH Candidate List

Diarsenic trioxide is on the REACH Annex XIV List:

Authorisation number	Sunset date	REACH authorization exemptions
	21/05/2015	

15.1.2. National regulations**Germany**

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**ARSENIC TRIOXIDE 98% EXTRA PURE****CAS-No.: 1327-53-3**

AwSV/VwVwS Annex reference :	Water hazard class (WGK) 3, strongly hazardous to water (Classification according to VwVwS, Annex 2; WGK No 299)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Denmark	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)
Recommendations Danish Regulation :	Young people below the age of 18 years are not allowed to use the product Pregnant/breastfeeding women working with the product must not be in direct contact with the product The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Full text of R-, H- and EUH-statements:

Acute Tox. 1 (Oral)	Acute toxicity (oral), Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Carc. 1A	Carcinogenicity, Category 1A
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H300	Fatal if swallowed
H314	Causes severe skin burns and eye damage
H350	May cause cancer
H410	Very toxic to aquatic life with long lasting effects
R28	Very toxic if swallowed
R34	Causes burns
R45	May cause cancer
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
C	Corrosive
N	Dangerous for the environment
T+	Very toxic

MATERIAL SAFETY DATA SHEET (SDS/MSDS)**ARSENIC TRIOXIDE 98% EXTRA PURE****CAS-No.: 1327-53-3****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. Chemnovo Synthesis Pvt Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.chemnovo.in for additional terms and conditions of sale.

Version: 2.0
Revision Date: 02 January 2026